

Al distribution and structure stability of H-BEA zeolite at different Si/Al ratios and temperatures: a first-principles study

Changdong Li^{a,b,c}, Xiuqin Dong^{a,b,c}, Haipeng Yu^{a,b,c}, Yingzhe Yu^{a,b,c,}*

^a Key Laboratory for Green Chemical Technology of Ministry of Education, R&D Center for Petrochemical Technology, Tianjin University, Tianjin 300072, China

^b Zhejiang Institute of Tianjin University, Ningbo, Zhejiang, 315201, China

^c State Key Laboratory of Engines, Tianjin University, Tianjin 300072, China

*Corresponding author

Tel.: +86-22-27405972 18

Fax: +86-22-27406119 19

E-mail address: yzhyu@tju.edu.cn

Supporting Information

Since zeolite is not a high-entropy alloy structure, its configurational entropy and the contribution of electrons to entropy can be ignored. Therefore, the contribution of entropy in zeolite system mainly comes from vibrational entropy. The standard Gibbs free energy for each structure (H-BEA(n), RAl-BEA(n), and BEA) is calculated by Equation S1 [1, 2]:

$$G^\theta = E_{\text{DFT}} + E_{\text{ZPE}} + U_{\text{vib}}^\theta - T * S_{\text{vib}}^\theta \quad (1)$$

In Equation S1, E_{DFT} is the total energy obtained directly from DFT calculations, T is the temperature of the temperature at which the H-BEA(n) zeolites are synthesized. E_{ZPE} is the zero-point-energy (ZPE) correction of the total energy:

$$E_{\text{ZPE}} = \sum_i \frac{h\nu_i}{2} \quad (2)$$

where h is Planck constant, ν_i is the vibration frequency of each atom (cm^{-1}). The small vibrational modes ($< 50 \text{ cm}^{-1}$) associated with the frustrated motions of the surface bound species may have little effect on ZPE and entropy value. De Moor et al. [3] studied the entropy contributions of these frequencies for alkanes and alkenes in FAU and suggested their replacement with 50 cm^{-1} . Therefore, in order to obtain consistent results, the immobile adsorbate approach was used for all surface species and the low-lying frequencies were replaced by normal modes of 50 cm^{-1} . U_{vib}^θ and S_{vib}^θ is the standard vibrational internal energy and vibrational entropy, respectively, which can be calculated based on the harmonic oscillator approximation:

$$U_{\text{vib}}^\theta = \sum_i \frac{h\nu_i}{e^{\frac{h\nu_i}{k_B T}} - 1} \quad (3)$$

$$S_{\text{vib}}^\theta = k_B \sum_i \left[\frac{h\nu_i}{k_B T \left(e^{\frac{h\nu_i}{k_B T}} - 1 \right)} - \ln \left(1 - e^{-\frac{h\nu_i}{k_B T}} \right) \right] \quad (4)$$

where k_B is Boltzmann constant. The standard Gibbs free energy for each gaseous species (H, Al, and Si) is calculated by Equation S5:

$$G^\theta = E_{\text{DFT}} + E_{\text{ZPE}} + \int_0^T C_p dT - T * S^\theta \quad (5)$$

The integral of heat capacity C_p can be separable into translational, rotational and vibrational parts:

$$\int_0^T C_p dT = \int_0^T (k_B + C_{V,trans} + C_{V,rot} + C_{V,vib}) dT \quad (6)$$

The standard entropy S^θ can also be calculated by the translational, rotational, and vibrational components, given by:

$$S^\theta = S_{trans} + S_{rot} + S_{vib} \quad (7)$$

$$S_{trans} = \frac{5}{2} k_B + k_B \ln \left[\left(\frac{2\pi M k_B T}{h^2} \right)^{\frac{3}{2}} \frac{k_B T}{p^\theta} \right] \quad (8)$$

$$S_{rot} = k_B \ln \left[\left(\frac{8\pi^2 I k_B T}{\sigma h^2} \right) + 1 \right] \quad (9)$$

where M is the mass of the molecule, I is the degenerate moment of inertia for a linear molecule, σ is the symmetry number of the molecule.

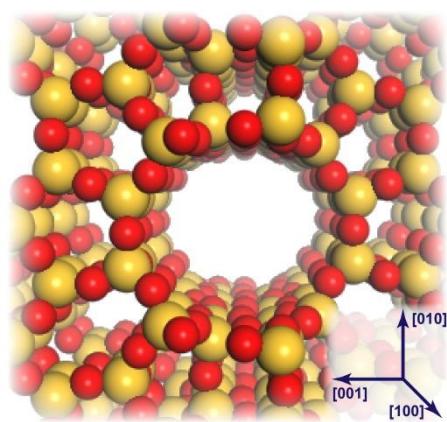


Fig. 1S. The unit cell structure of BEA zeolite. Up along the paper is the [010] axis. Perpendicular to the paper facing outwards is the [010] axis. All the other structures are the same orientation. The unit cell is composed of Si and O. O and Si atoms are depicted as red and yellow spheres.

Table 1S

Al-O and Si-O bond distances near H atom, O-H bond distances, hydrogen bond distances and O-Al-O angles for the nine Brønsted acid sites of H-BEA zeolite.

T site	The most stable Brønsted acid sites	d_{Al-O} (Å)	d_{Si-O} (Å)	d_{O-H} (Å)	$d_{O...H}$ (Å)	$\angle_{Al/Si-O-Si}$ (°)
Si-BEA	-	-	1.60~1.63	-	-	140~160
T1	Al(T1)-OH-Si(T3)	1.901	1.704	0.977	-	132.378
T2	Al(T2)-OH-Si(T4)	1.900	1.704	0.976	-	131.721
T7	Al(T7)-OH-Si(T5)	1.924	1.697	0.991	1.974	131.448
T9	Al(T9)-OH-Si(T1X)	1.884	1.695	0.975	-	130.649
T3	Al(T3)-OH-Si(T5)	1.936	1.699	0.994	1.968	131.902
T4	Al(T4)-OH-Si(T6)	1.922	1.691	1.000	1.851	130.548
T5	Al(T5)-OH-Si(T7)	1.891	1.710	0.992	1.934	132.768
T6	Al(T6)-OH-Si(T8)	1.891	1.708	0.996	1.856	131.842
T8	Al(T8)-OH-Si(T6Y)	1.923	1.697	0.995	1.896	132.667

Table 2S shows the results of 23 structures in which T sites are occupied by 2 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

Table 2S

Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(2).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)				
		323K	373K	423K	473K	
T1T1	5	-87.3	-80.1	-77.0	-70.4	
T1T2	6	-92.3	-84.9	-81.7	-75.0	
T1T7	6	-94.2	-86.6	-83.3	-76.5	
T1T9	4	-88.1	-80.9	-77.8	-71.1	
T2T2	6	-91.1	-83.9	-80.7	-74.1	
T2T7	6	-97.5	-90.1	-86.8	-80.1	
T2T9	3	-93.8	-86.6	-83.4	-76.8	
T7T7	7	-105.4	-97.5	-93.7	-86.4	
T7T9	3	-101.1	-93.6	-90.1	-83.2	
T9T9	3	-88.6	-81.2	-77.9	-71.1	
T1T1	1	-68.0	-60.6	-57.2	-50.4	
T1T2	1	-54.8	-47.3	-44.0	-37.2	
T1T7	2	-85.9	-79.3	-76.7	-70.6	
AlSiAl-	T1T9	2	-77.1	-70.1	-67.1	-60.7
	T2T7	1	-85.3	-78.1	-74.9	-68.3
	T2T9	1	-87.3	-80.2	-77.2	-70.7
	T7T9	1	-97.2	-89.6	-86.2	-79.2
	T1T1	1	-46.1	-39.5	-37.0	-31.1
	T1T2	1	-27.8	-21.0	-18.3	-12.1
	T1T9	2	-37.4	-30.0	-26.6	-19.8
AlAl-	T2T2	1	-41.6	-34.2	-31.0	-24.3
	T2T7	1	-62.4	-54.8	-51.3	-44.4
	T7T7	1	-72.6	-65.2	-62.0	-55.2

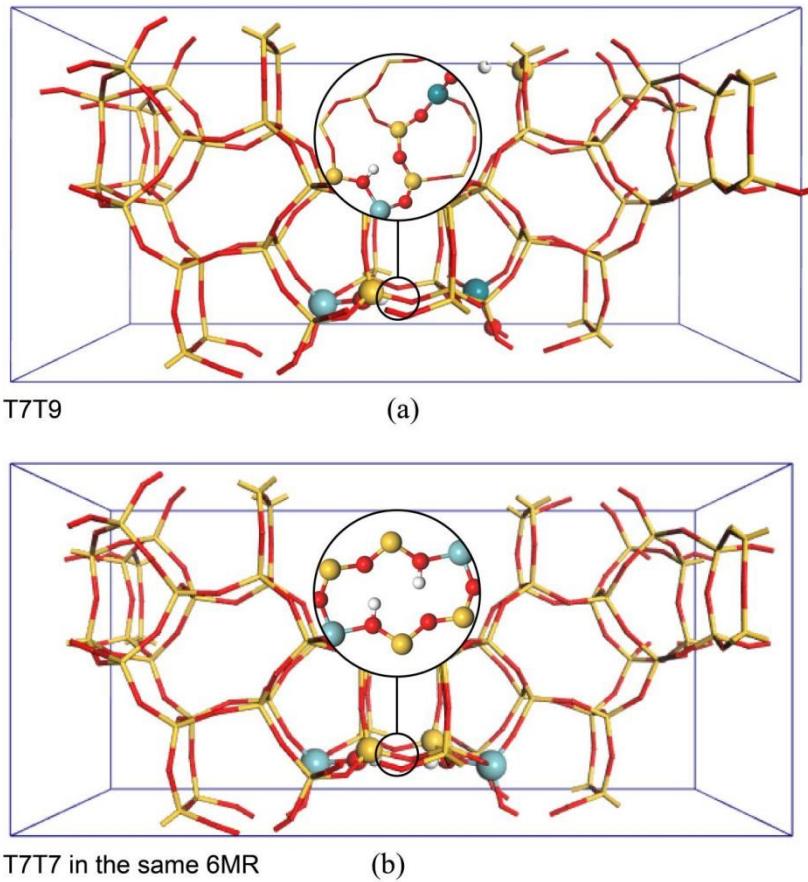


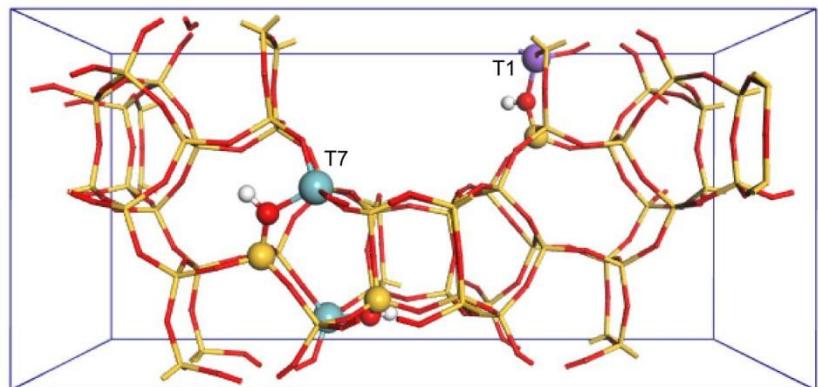
Fig. 2S. The unit cell of (a) T7T9 and (b) T7T7 in the same 6MR in H-BEA(2). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

Table 3S shows the results of 28 structures in which T sites are occupied by 3 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

Table 3S

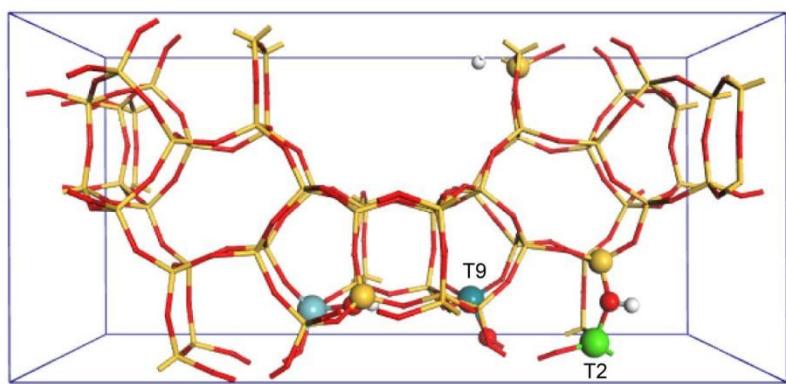
Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(3).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)				
		323K	373K	423K	473K	
T1T1T1	3	-119.6	-110.1	-100.2	-90.7	
T1T1T2	4	-130.1	-120.6	-110.8	-101.3	
T1T1T7	3	-129.3	-119.6	-109.6	-99.9	
T1T1T9	1	-111.0	-101.5	-91.6	-82.0	
T1T2T2	4	-127.8	-118.3	-108.5	-99.0	
T1T2T7	4	-136.5	-126.9	-116.8	-107.1	
T1T2T9	4	-136.3	-126.7	-116.8	-107.2	
T1T7T7	5	-140.8	-130.6	-120.0	-109.7	
T1T7T9	3	-131.2	-120.8	-110.2	-99.8	
T1T9T9	1	-111.9	-102.1	-91.9	-82.1	
T2T2T2	4	-120.3	-110.5	-100.3	-90.4	
T2T2T7	4	-137.8	-127.8	-117.4	-107.4	
T2T2T9	5	-134.0	-124.1	-113.9	-104.0	
T2T7T7	4	-147.7	-137.5	-126.9	-116.6	
T2T7T9	4	-142.0	-132.1	-121.8	-111.9	
T2T9T9	2	-128.4	-118.4	-108.0	-98.0	
T7T7T7	4	-145.9	-135.4	-124.6	-114.1	
T7T7T9	3	-145.4	-135.2	-125.1	-115.4	
T7T9T9	1	-135.4	-125.4	-115.5	-105.4	
T9T9T9	2	-118.7	-108.6	-98.5	-88.3	
T1T2T7	3	-122.0	-112.1	-102.3	-92.3	
T1T7T7	2	-120.7	-110.5	-100.4	-90.1	
T1T7T9	3	-128.1	-118.1	-108.1	-98.1	
AlSiAl-	T2T2T7	1	-104.6	-98.1	-86.5	-78.3
	T2T7T7	2	-97.7	-87.4	-77.2	-66.9
	T2T7T9	3	-127.7	-117.7	-107.8	-97.8
	T7T7T9	6	-154.0	-143.6	-132.9	-122.5
	T7T9T9	1	-139.8	-129.7	-119.2	-109.1



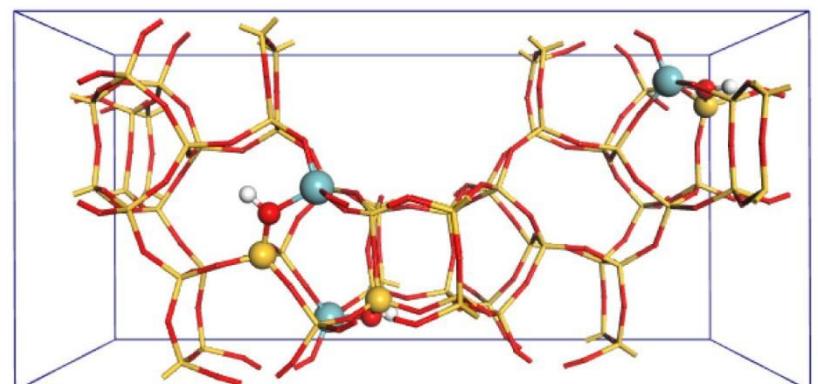
T1T7T7

(a)



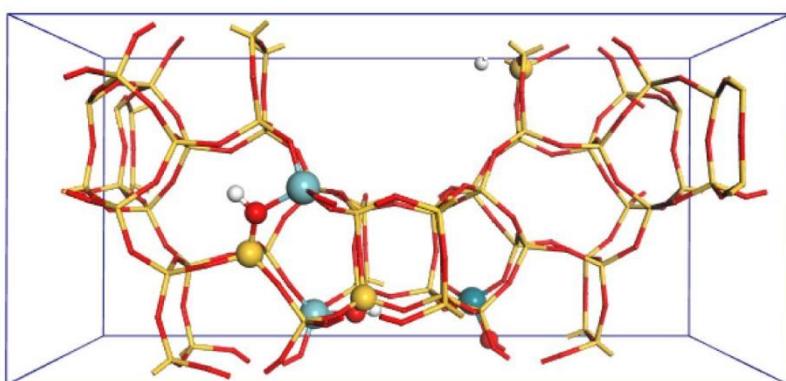
T2T7T9

(b)



T7T7T7

(c)



T7T7T9

(d)

Fig. 3S. The unit cell of (a) T1T7T7, (b) T2T7T9, (c) T7T7T7 and (d) T7T7T9 in H-BEA(3). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

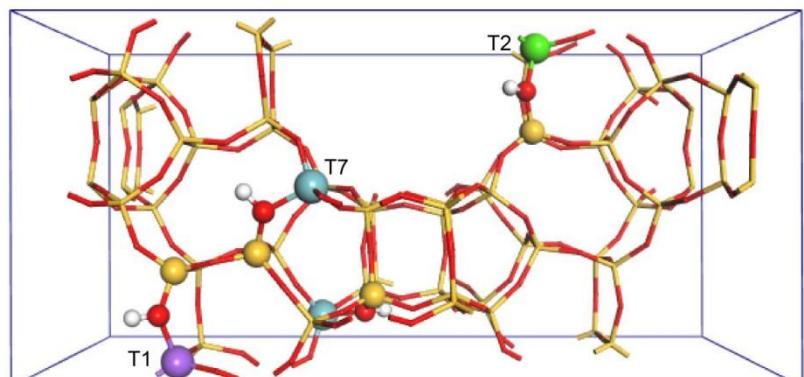
Table 4S shows the results of 43 structures in which T sites are occupied by 4 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

Table 4S

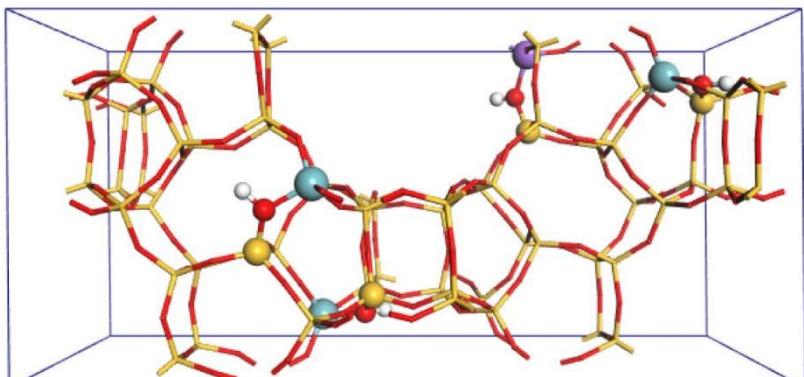
Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(4).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)			
		323K	373K	423K	473K
T1T1T1T1	1	-161.2	-148.4	-135.1	-122.2
T1T1T1T2	2	-164.5	-151.7	-138.4	-125.6
T1T1T1T7	1	-159.7	-146.8	-133.5	-120.5
T1T1T2T2	2	-158.5	-145.2	-131.4	-118.1
T1T1T2T7	3	-168.9	-155.9	-142.5	-129.5
T1T1T2T9	2	-170.8	-158.0	-144.7	-131.9
T1T1T7T7	3	-169.4	-155.2	-140.5	-126.3
T1T1T7T9	1	-167.7	-154.7	-141.2	-128.1
T1T2T2T2	2	-155.3	-142.5	-129.3	-116.5
T1T2T2T7	2	-170.3	-157.4	-144.0	-131.1
T1T2T2T9	3	-170.2	-157.8	-145.1	-132.7
T1T2T7T7	4	-185.4	-172.0	-158.2	-144.9
T1T2T7T9	3	-175.0	-161.4	-147.4	-133.8
T1T2T9T9	2	-151.1	-138.1	-124.7	-111.6
T1T7T7T7	4	-182.6	-168.9	-154.0	-140.2
T1T7T7T9	3	-178.5	-164.9	-150.8	-137.2
T1T7T9T9	1	-153.1	-139.7	-125.9	-112.4
T2T2T2T2	2	-146.9	-133.7	-120.0	-106.7
T2T2T2T7	2	-163.1	-149.7	-136.0	-122.6
T2T2T2T9	3	-161.6	-148.5	-134.8	-121.6
T2T2T7T7	2	-186.0	-172.6	-158.8	-145.4
T2T2T7T9	3	-178.5	-165.0	-150.9	-137.4
T2T2T9T9	1	-174.2	-161.2	-147.6	-134.6
T2T7T7T7	3	-177.4	-163.7	-149.7	-136.0
T2T7T7T9	2	-189.9	-176.2	-162.3	-148.8
T2T7T9T9	1	-180.4	-167.2	-153.5	-140.2
T2T9T9T9	1	-155.9	-142.5	-128.7	-115.2
T7T7T7T7	2	-188.4	-173.2	-157.3	-141.1

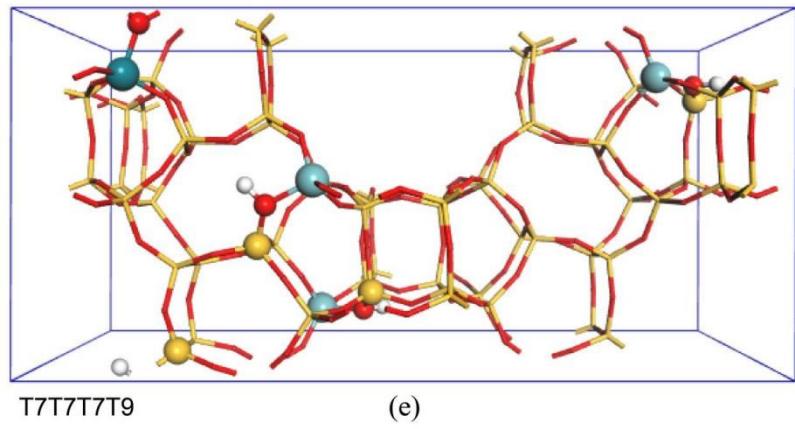
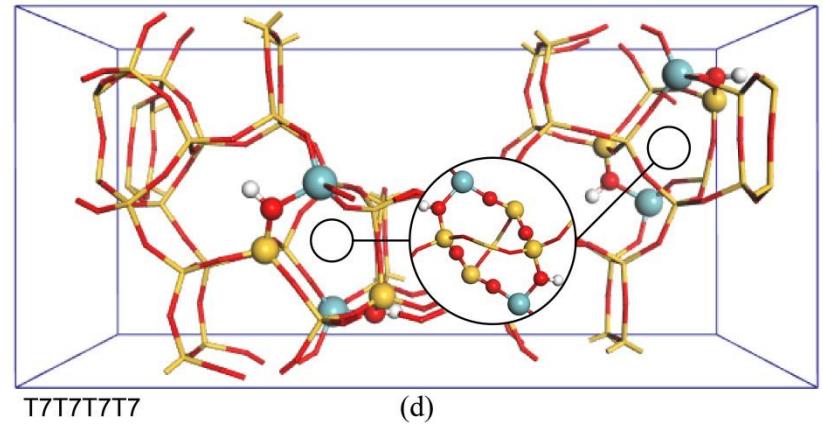
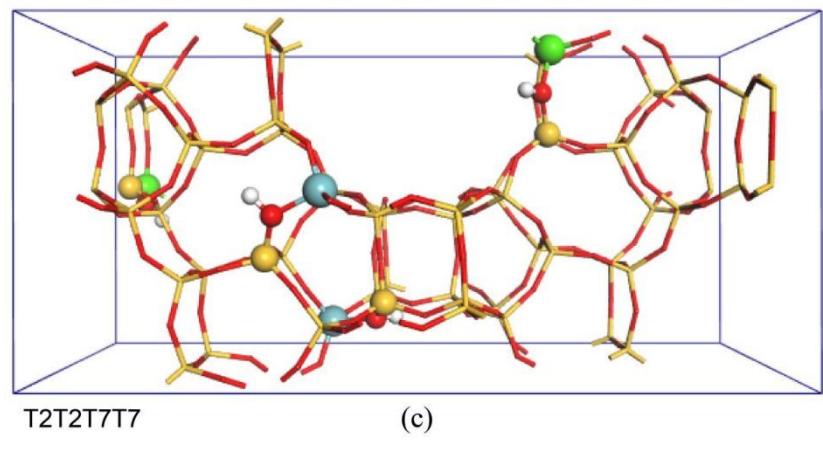
T7T7T7T9	2	-189.3	-175.6	-161.3	-147.5	
T7T7T9T9	2	-178.6	-164.9	-150.7	-137.0	
T7T9T9T9	1	-164.2	-150.7	-136.9	-123.4	
T9T9T9T9	1	-147.7	-134.4	-120.7	-107.4	
T1T2T7T7	3	-157.0	-143.5	-129.5	-115.9	
T1T2T7T9	2	-165.8	-152.4	-138.6	-125.1	
T1T7T7T7	4	-164.1	-150.3	-136.1	-122.2	
T1T7T7T9	3	-165.5	-151.9	-137.8	-124.2	
T2T2T7T7	2	-137.4	-123.1	-108.4	-94.1	
AlSiAl-	T2T2T7T9	2	-148.9	-135.4	-121.6	-108.1
T2T7T7T7	1	-137.4	-123.7	-109.6	-95.9	
T2T7T7T9	2	-189.4	-175.7	-161.6	-147.8	
T2T7T9T9	1	-179.8	-165.2	-149.8	-134.7	
T7T7T7T9	2	-181.6	-167.0	-151.7	-136.7	
T7T7T9T9	1	-188.0	-174.3	-160.1	-146.3	



T1T2T7T7 (a)



T1T7T7T7 (b)



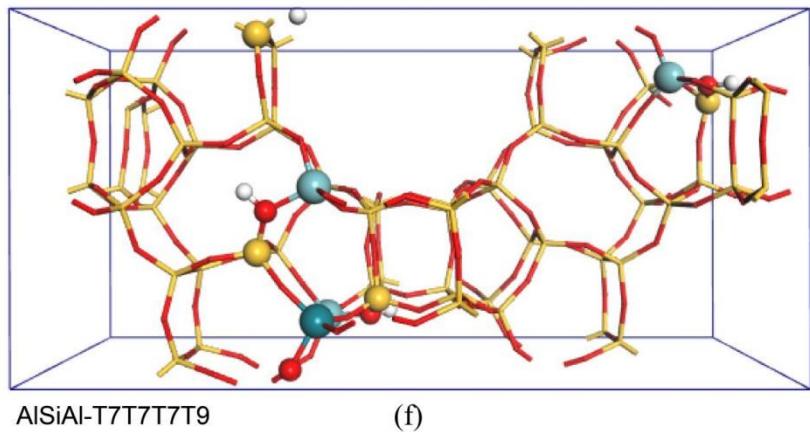


Fig. 4S. The unit cell of (a) T1T2T7T7, (b) T1T7T7T7, (c)T2T2T7T7, (d)T7T7T7T7, (e)T7T7T7T9, (f)AlSiAl-T7T7T7T9 and (g)AlSiAl-T7T7T9T9 in H-BEA(4). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

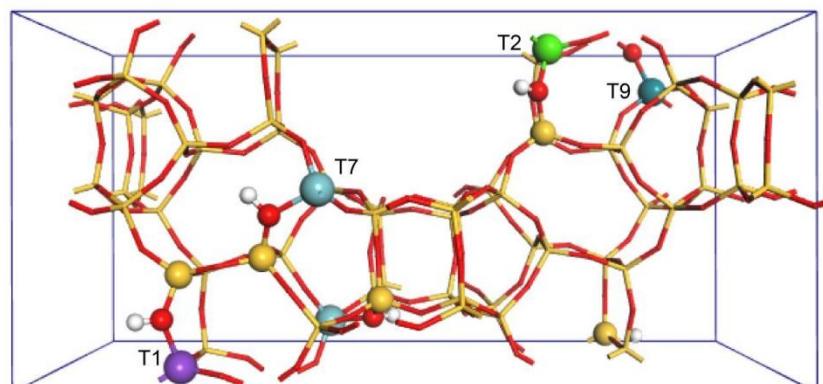
Table 5S shows the results of 41 structures in which T sites are occupied by 5 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

Table 5S

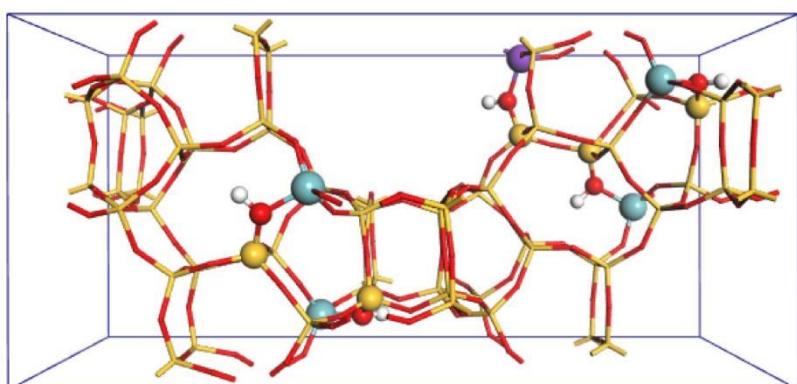
Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(5).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)			
		323K	373K	423K	473K
T1T1T1T2T7	1	-200.1	-184.0	-167.4	-151.3
T1T1T1T7T7	1	-209.2	-193.0	-176.1	-159.9
T1T1T2T2T7	2	-203.5	-187.3	-170.6	-154.4
T1T1T2T2T9	1	-195.4	-179.5	-163.0	-147.1
T1T1T2T7T7	1	-205.8	-189.5	-172.5	-156.2
T1T1T7T7T7	1	-207.3	-190.8	-173.8	-157.3
T1T2T2T2T7	2	-194.8	-178.7	-162.0	-145.8
T1T2T2T2T9	1	-190.6	-174.7	-158.3	-142.3
T1T2T2T7T7	2	-210.3	-194.1	-177.3	-161.1
T1T2T2T7T9	1	-212.2	-196.1	-179.4	-163.2
T1T2T7T7T7	2	-208.2	-191.8	-174.9	-158.6
T1T2T7T7T9	2	-217.7	-201.2	-184.1	-167.3
T1T7T7T7T7	1	-225.5	-208.3	-190.5	-173.3
T1T7T7T7T9	2	-225.9	-208.8	-191.1	-173.9
T2T2T2T2T9	1	-172.8	-156.8	-140.2	-124.1
T2T2T2T7T9	1	-205.0	-188.9	-172.1	-156.0
T2T2T7T7T7	2	-205.2	-188.9	-172.1	-155.8
T2T2T7T7T9	1	-225.1	-208.6	-191.7	-175.3
T2T2T7T9T9	1	-210.3	-193.9	-177.1	-160.8
T2T2T9T9T9	1	-184.2	-168.0	-151.4	-135.4
T2T7T7T7T7	2	-196.5	-179.7	-162.5	-145.9
T2T7T7T7T9	2	-228.0	-211.0	-193.4	-176.4
T2T7T7T9T9	1	-227.3	-210.6	-193.4	-176.8
T7T7T7T7T9	2	-229.5	-212.1	-194.0	-176.6
T7T7T7T9T9	1	-226.2	-208.9	-191.0	-173.6
T7T7T9T9T9	1	-211.8	-195.1	-177.8	-161.0
T1T1T1T7T7	2	-197.1	-180.4	-163.1	-146.3
AlSiAl-T1T1T2T7T7	2	-184.4	-167.8	-150.6	-133.9
T1T1T7T7T7	2	-197.8	-181.2	-164.0	-147.4

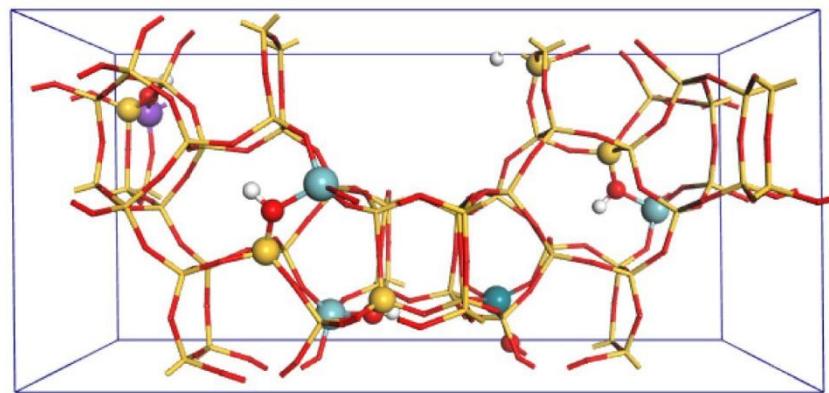
T1T1T7T7T9	1	-226.1	-209.2	-191.8	-174.9
T1T2T2T7T7	3	-199.0	-182.4	-165.2	-148.6
T1T2T7T7T9	3	-204.2	-187.6	-170.4	-153.7
T1T7T7T7T7	4	-212.3	-195.6	-178.3	-161.6
T1T7T7T7T9	3	-219.0	-202.0	-184.3	-167.3
T2T2T7T7T7	2	-179.0	-162.0	-144.4	-127.4
T2T2T7T7T9	3	-193.0	-176.2	-158.9	-142.1
T2T7T7T7T7	4	-194.2	-177.1	-159.5	-142.4
T2T7T7T7T9	5	-202.8	-185.9	-168.3	-151.4
T2T7T7T9T9	2	-233.9	-217.0	-199.6	-182.7
T7T7T7T7T9	2	-239.5	-222.0	-203.9	-186.4
T7T7T7T9T9	2	-222.9	-205.5	-187.6	-170.3



(a) T1T2T7T7T9

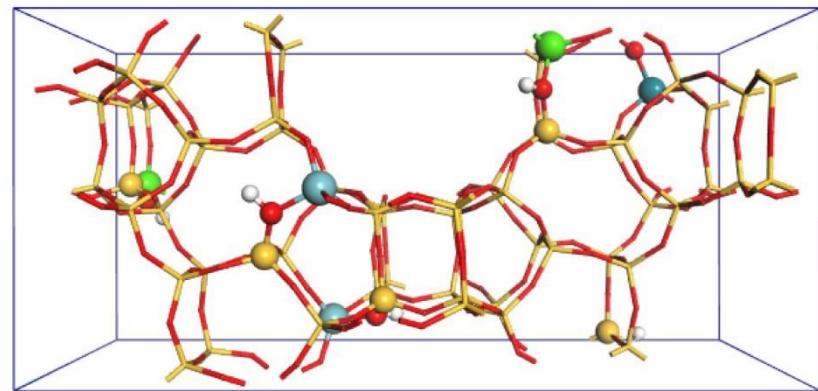


(b) T1T7T7T7T7



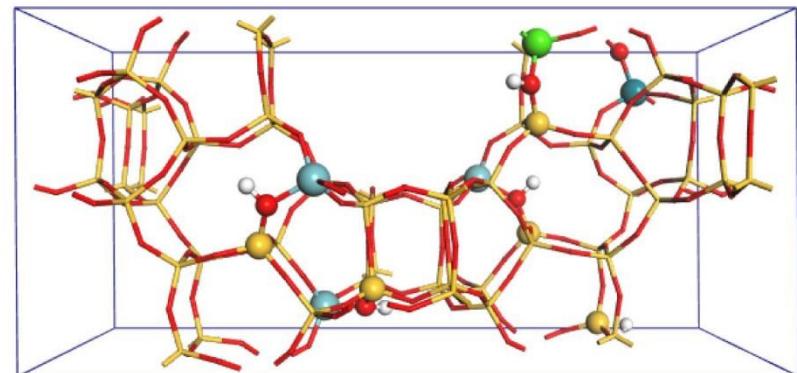
T1T7T7T7T9

(c)



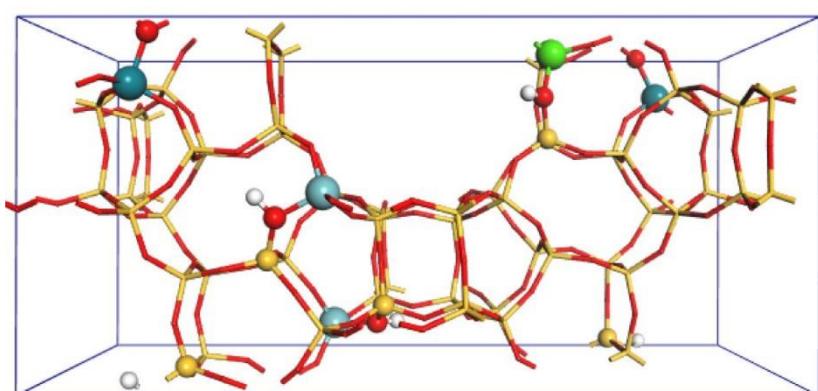
T2T2T7T7T9

(d)



T2T7T7T7T9

(e)



T2T7T7T9T9

(f)

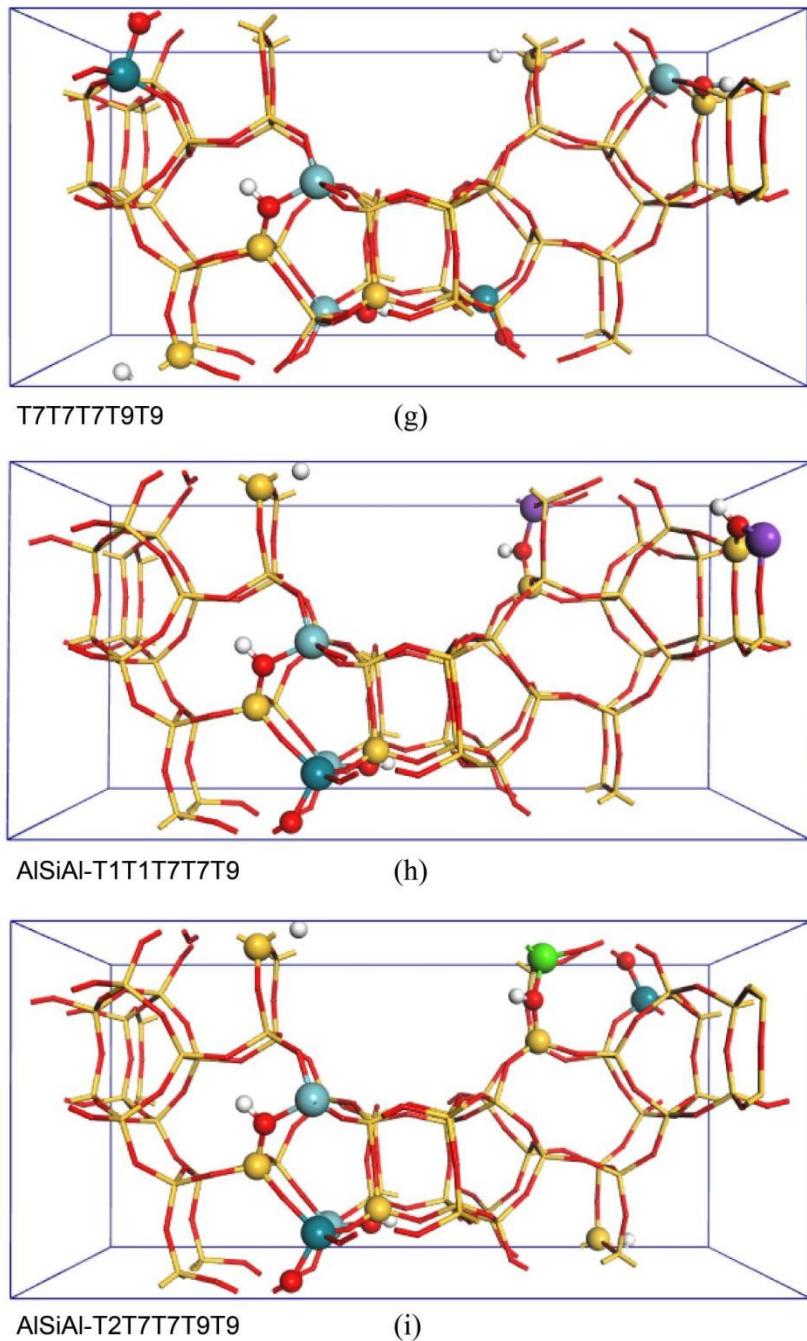


Fig. 5S. The unit cell of (a) T1T2T7T7T9, (b) T1T7T7T7T7, (c) T1T7T7T7T9, (d) T2T2T7T7T9, (e) T2T7T7T7T9, (f) T2T7T7T9T9, (g) T7T7T7T9T9, (h) AlSiAl-T1T1T7T7T9 and (i) AlSiAl-T2T7T7T9T9 in H-BEA(5). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

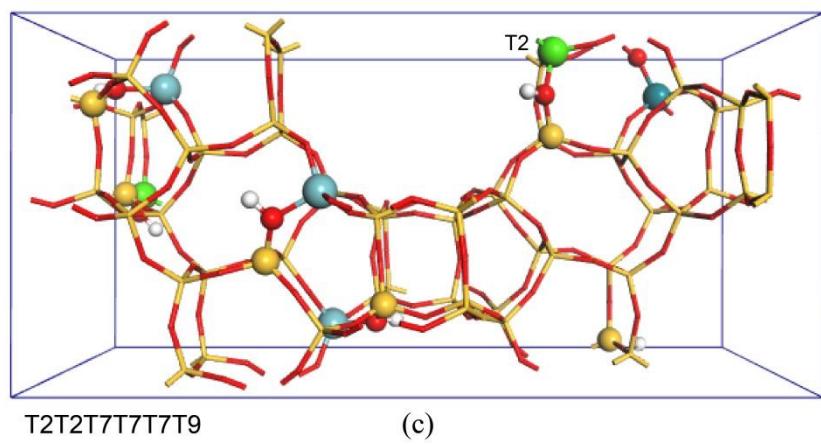
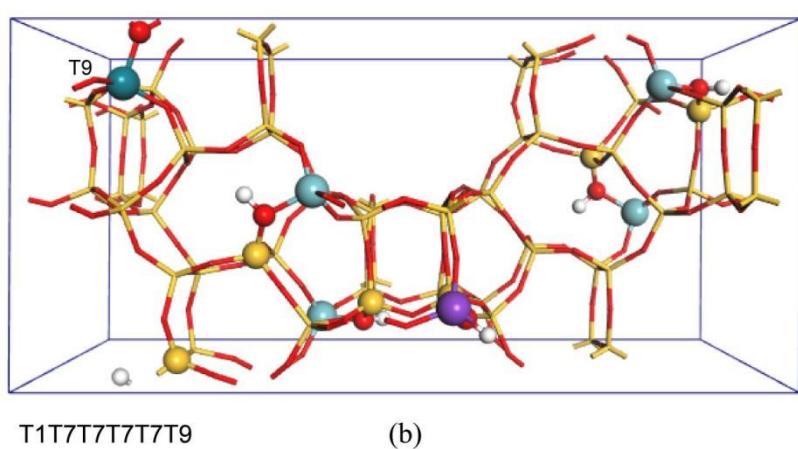
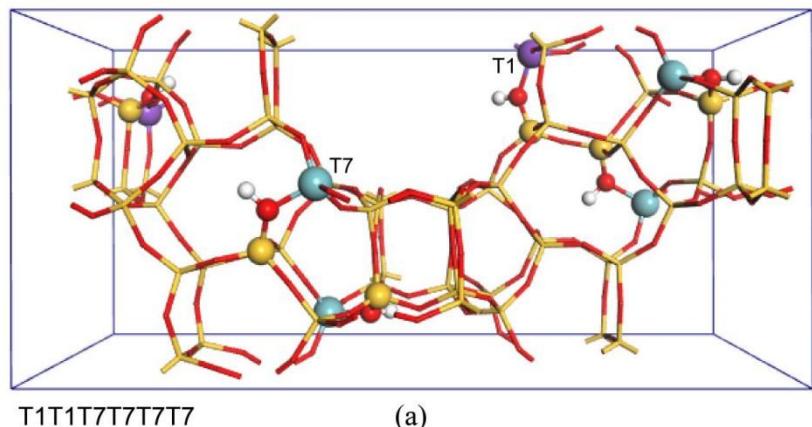
Table 6S shows the results of 33 structures in which T sites are occupied by 6 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

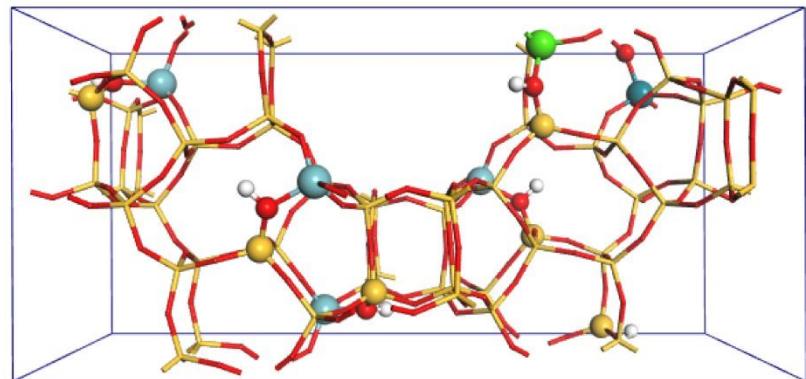
Table 6S

Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(6).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)				
		323K	373K	423K	473K	
T1T1T2T2T7T7	1	-230.9	-211.3	-191.0	-171.4	
T1T1T2T2T7T9	1	-226.0	-205.3	-184.8	-163.3	
T1T1T2T7T7T7	1	-234.2	-213.6	-193.0	-171.4	
T1T1T2T7T7T9	1	-237.6	-217.0	-196.5	-175.0	
T1T1T7T7T7T7	2	-261.6	-241.3	-220.2	-199.9	
T1T2T2T2T7T9	1	-236.5	-216.7	-196.3	-176.5	
T1T2T2T7T7T7	1	-226.6	-206.7	-186.0	-166.1	
T1T2T2T7T7T9	1	-246.4	-226.5	-205.8	-185.8	
T1T2T7T7T7T7	1	-218.5	-198.2	-177.3	-157.1	
T1T2T7T7T7T9	1	-245.8	-225.5	-204.6	-184.4	
T1T2T7T7T9T9	1	-247.7	-227.7	-206.9	-186.8	
T1T7T7T7T7T9	2	-264.6	-244.0	-222.7	-202.0	
T2T2T2T7T9T9	1	-227.0	-206.9	-186.1	-165.9	
T2T2T7T7T7T7	1	-223.7	-204.3	-184.2	-164.7	
T2T2T7T7T7T9	1	-262.4	-244.9	-227.1	-210.3	
T2T2T7T7T9T9	1	-253.1	-233.0	-212.3	-192.2	
T2T7T7T7T7T9	1	-260.5	-240.4	-219.7	-199.6	
T2T7T7T7T9T9	1	-260.7	-240.6	-219.8	-199.7	
T7T7T7T7T9T9	1	-268.3	-247.4	-225.8	-204.8	
T1T2T2T7T7T9	2	-235.5	-215.6	-195.1	-175.3	
T1T2T7T7T7T7	3	-252.6	-232.5	-211.8	-191.7	
T1T2T7T7T7T9	2	-266.7	-246.4	-225.4	-205.0	
T1T2T7T7T9T9	1	-268.1	-247.3	-225.8	-205.0	
AlSiAl-	T1T7T7T7T7T9	2	-321.5	-298.9	-276.7	-255.2
	T2T2T2T7T7T7	1	-210.9	-190.7	-170.0	-149.9
	T2T2T7T7T7T7	2	-214.2	-193.0	-171.2	-150.0
	T2T2T7T7T7T9	2	-241.5	-221.1	-200.1	-179.7
	T2T2T7T7T9T9	4	-260.5	-240.3	-219.6	-199.5

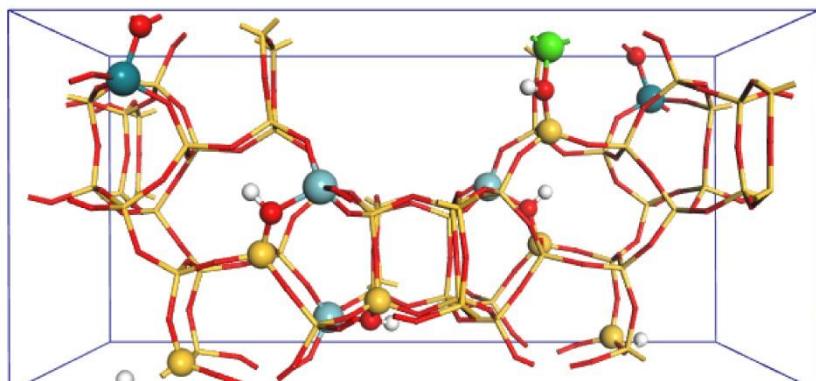
T2T7T7T7T7T9	1	-259.4	-238.8	-217.7	-197.2
T2T7T7T7T9T9	3	-295.9	-275.3	-254.2	-233.8
T2T7T7T9T9T9	2	-288.9	-268.6	-247.7	-227.4
T7T7T7T7T9T9	3	-337.3	-316.6	-295.2	-274.5
T7T7T7T9T9T9	2	-283.0	-262.5	-241.3	-220.8





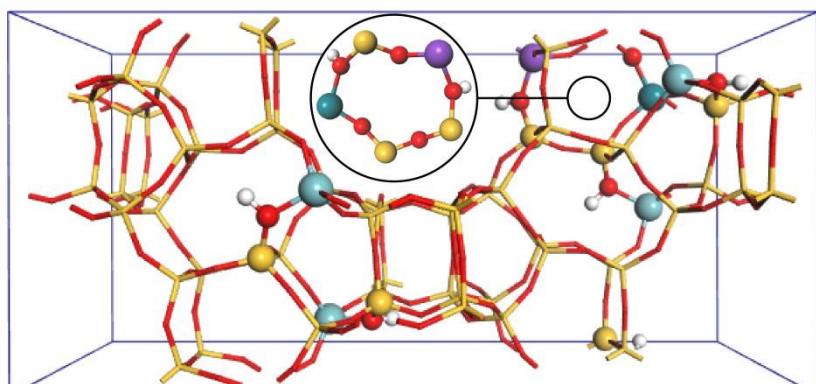
T2T7T7T7T7T9

(d)



T2T7T7T7T9T9

(e)



AlSiAl-T1T7T7T7T9

(f)

Fig. 6S. The unit cell of (a) T1T1T7T7T7T7, (b) T1T7T7T7T7T9, (c) T2T2T7T7T7T9, (d) T2T7T7T7T7T9, (e) T2T7T7T7T9T9 and (f) AlSiAl-T1T7T7T7T7T9 in H-BEA(6). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

Table 7S shows the results of 22 structures in which T sites are occupied by 7 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

Table 7S

Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA(7).

T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)				
		323K	373K	423K	473K	
T1T1T2T2T7T7T9	1	-268.0	-245.3	-221.8	-199.1	
T1T2T2T7T7T7T9	1	-275.0	-252.0	-228.2	-205.2	
T2T2T7T7T7T7T9	1	-295.8	-272.1	-247.5	-223.8	
T1T1T1T7T7T7T7	2	-270.4	-246.4	-221.7	-197.8	
T1T1T2T7T7T7T7	2	-258.0	-234.3	-209.8	-186.1	
T1T1T2T7T7T7T9	4	-289.7	-266.3	-242.0	-218.6	
T1T1T7T7T7T7T9	3	-330.5	-306.8	-282.3	-258.6	
T1T2T2T7T7T7T9	1	-261.0	-237.4	-213.1	-189.4	
T1T2T2T7T7T9T9	2	-278.7	-255.5	-231.5	-208.2	
T1T2T7T7T7T7T9	5	-314.5	-290.8	-266.4	-242.7	
T1T2T7T7T7T9T9	4	-320.3	-296.8	-272.4	-248.8	
T1T7T7T7T7T9T9	11	-365.7	-342.0	-317.4	-293.5	
AlSiAl-	T2T2T2T7T7T7T9	1	-251.5	-227.6	-202.9	-179.0
	T2T2T2T7T7T9T9	4	-269.2	-245.8	-221.5	-198.0
	T2T2T7T7T7T7T9	1	-280.7	-256.7	-231.8	-207.7
	T2T2T7T7T7T9T9	2	-289.8	-266.3	-241.9	-218.3
	T2T2T7T7T9T9T9	4	-315.3	-291.8	-267.5	-243.9
	T2T7T7T7T7T9T9	8	-352.6	-328.7	-304.0	-280.1
	T2T7T7T7T9T9T9	1	-333.8	-310.1	-285.6	-261.8
	T2T7T7T9T9T9T9	1	-315.4	-291.9	-267.6	-244.0
	T7T7T7T7T9T9T9	5	-350.8	-325.7	-300.1	-274.7
	T7T7T7T9T9T9T9	1	-331.0	-307.2	-282.7	-258.8

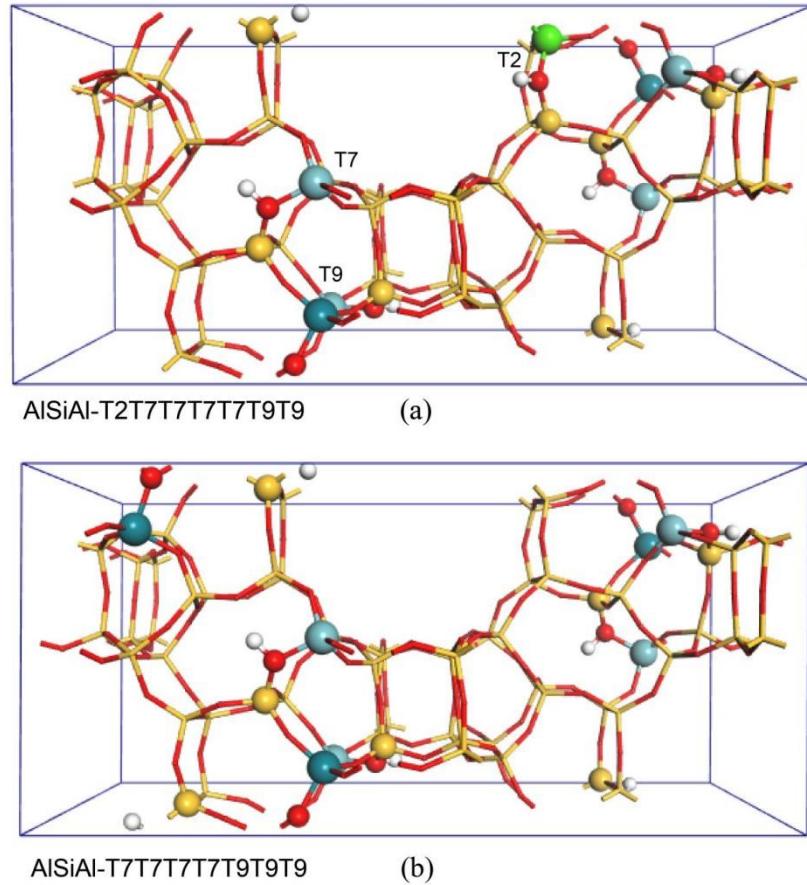


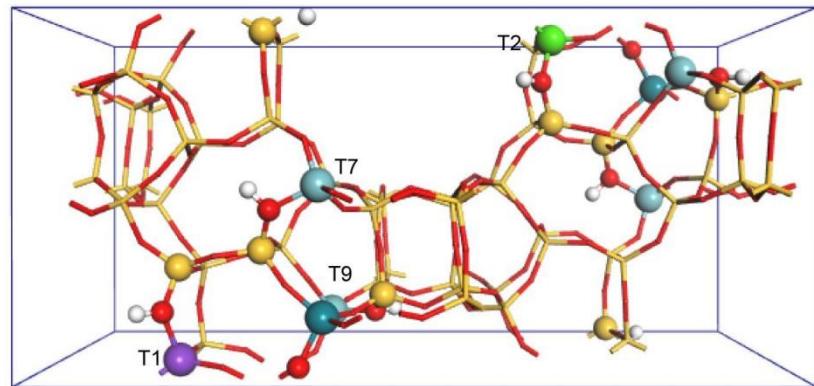
Fig. 7S. The unit cell of (a) AlSiAl-T2T7T7T7T7T9T9 and (b) AlSiAl-T7T7T7T7T9T9T9 in H-BEA(7). H, O and Si atoms are depicted as white, red and yellow spheres, respectively. The color of T site occupied by Al corresponds to that of Fig. 2.

Table 8S shows the results of 19 structures in which T sites are occupied by 8 Al. The positions with the lowest substitution energy are listed in the table for the different structures of the same T sites.

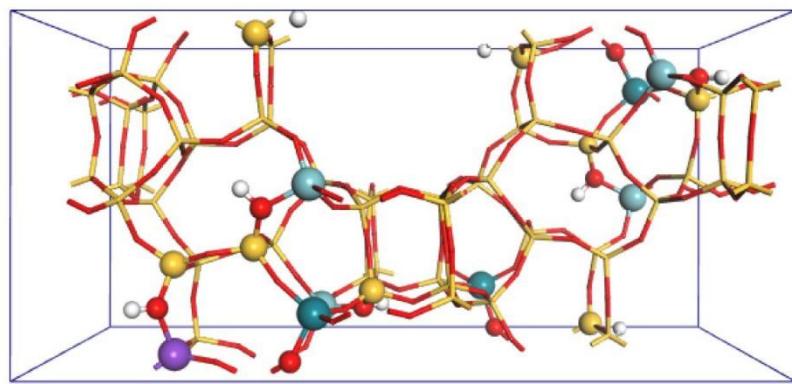
Table 8S

Substitution energy $G_{Al\text{-}sub}$ at different synthesis temperatures of all possible structures of H-BEA (8).

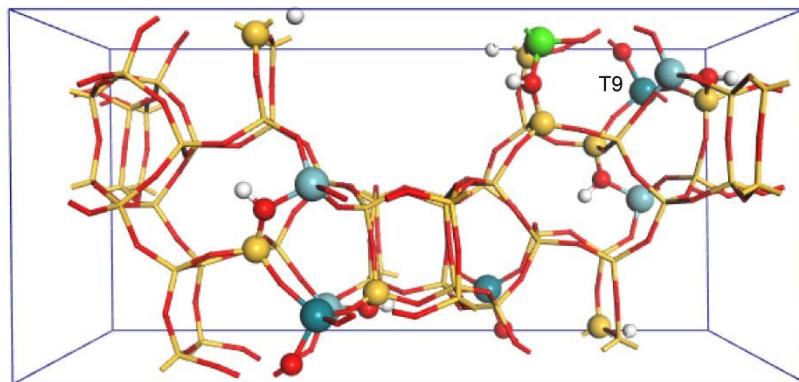
T sites occupied by Al	Number of distribution types	$G_{Al\text{-}sub}$ (kJ/mol)				
		323K	373K	423K	473K	
T1T1T1T7T7T7T9	2	-362.9	-336.2	-308.6	-281.9	
T1T1T2T2T7T7T9	2	-308.1	-281.7	-254.3	-227.8	
T1T1T2T2T7T7T9	1	-345.3	-318.9	-291.5	-265.1	
T1T1T2T7T7T7T9	2	-354.6	-327.8	-300.1	-273.3	
T1T1T2T7T7T7T9	1	-332.1	-304.6	-276.3	-248.8	
T1T1T7T7T7T7T9	6	-408.8	-381.9	-354.1	-327.2	
T1T2T2T7T7T7T9	2	-350.0	-323.2	-295.3	-268.4	
T1T2T2T7T7T7T9	3	-342.3	-315.4	-287.6	-260.7	
T1T2T7T7T7T7T9	3	-394.4	-367.5	-339.6	-312.6	
AlSiAl-	T1T2T7T7T7T9T9	1	-348.9	-322.1	-294.4	-267.5
	T1T7T7T7T7T9T9	1	-390.2	-363.1	-335.1	-308.0
	T2T2T2T7T7T9T9	3	-327.0	-300.3	-272.7	-245.9
	T2T2T7T7T7T7T9	2	-326.0	-298.9	-270.9	-243.7
	T2T2T7T7T7T7T9	6	-383.1	-356.1	-328.1	-301.0
	T2T2T7T7T7T9T9	2	-347.2	-319.6	-291.1	-263.4
	T2T2T7T7T9T9T9	1	-346.1	-318.3	-289.7	-261.8
	T2T7T7T7T7T9T9	2	-391.8	-364.6	-336.0	-309.4
	T2T7T7T7T9T9T9	1	-373.8	-346.8	-318.9	-291.9
	T7T7T7T7T9T9T9	1	-382.4	-355.2	-327.1	-299.8



AlSiAl-T1T2T7T7T7T9T9 (a)



AlSiAl-T1T7T7T7T7T9T9T9 (b)



AlSiAl-T2T7T7T7T7T9T9T9 (c)

Fig. 8S. The unit cell of (a) AlSiAl-T1T2T7T7T7T9T9, (b) AlSiAl-T1T7T7T7T7T9T9T9, (c) AlSiAl-

T2T7T7T7T7T9T9T9 in H-BEA(8). H, O and Si atoms are depicted as white, red and yellow spheres, respectively.

The color of T site occupied by Al corresponds to that of Fig. 2.

Table 9SSubstitution energy G_{Al-sub} at different synthesis temperatures of H-BEA(n).

Number of Al atoms in H-BEA(n)	G_{Al-sub} (kJ/mol)				
	323K	373K	423K	473K	
Normal Structure	1	-66.1	-62.7	-59.2	-55.8
	2	-103.3	-95.5	-91.9	-84.8
	3	-144.3	-135.0	-124.6	-114.5
	4	-186.9	-173.1	-159.6	-146.7
	5	-226.8	-209.8	-192.2	-175.1
	6	-263.0	-243.1	-222.6	-202.7
	7	-295.8	-272.1	-247.5	-223.8
AlSiAl Structure	2	-97.2	-89.6	-86.2	-79.2
	3	-154.0	-143.6	-132.9	-122.5
	4	-186.3	-172.3	-160.9	-147.1
	5	-236.7	-219.5	-201.8	-184.6
	6	-329.4	-316.6	-295.2	-274.5
	7	-356.4	-332.1	-310.7	-286.8
	8	-396.3	-369.3	-346.9	-319.9

Table 10SAverage substitution energy \bar{G}_{Al-sub} at different synthesis temperatures of H-BEA(n).

Number of Al atoms	\bar{G}_{Al-sub} (kJ/mol)				
	323K	373K	423K	473K	
Normal Structure	1	-66.1	-62.7	-59.2	-55.8
	2	-51.6	-47.8	-45.9	-42.4
	3	-48.1	-45.0	-41.5	-38.2
	4	-46.7	-43.3	-39.9	-36.7
	5	-45.4	-42.0	-38.4	-35.0
	6	-43.8	-40.5	-37.1	-33.8
	7	-42.3	-38.9	-35.4	-32.0
AlSiAl Structure	2	-48.6	-44.8	-43.1	-39.6
	3	-51.3	-47.9	-44.3	-40.8
	4	-46.6	-43.1	-40.2	-36.8
	5	-47.3	-43.9	-40.4	-36.9
	6	-54.9	-52.8	-49.2	-45.8
	7	-50.9	-47.4	-44.4	-41.0
	8	-49.5	-46.2	-43.4	-40.0

Table 11S shows the substitution energy of silanol nests with different silanol orientations and the most stable orientation after the dealuminization of Al atoms.

Table 11S

The substitution energies of RAl-BEA after silanol nests formation at different dealuminization sites. T1T2T3T9 represents that in silanol nest, the silanol of T1 site forms hydrogen bond with O atom of T2 site, the silanol of T2 site forms hydrogen bond with T3 site, the silanol of T3 site forms hydrogen bond with T9 site, and the silanol of T9 site forms hydrogen bond with T1 site.

Dealuminated T site	Silanol nests orientation	$G_{RAl-sub}$ (kJ/mol)			
		373K	473K	573K	673K
T1	T1T2T3T9	-311.5	-295.8	-278.5	-259.8
	T1T2T9T3	-316.0	-300.9	-283.9	-265.4
	T1T3T2T9	-309.8	-293.9	-276.5	-257.7
	T1T3T9T2	-301.9	-285.2	-267.3	-248.1
	T1T9T2T3	-298.9	-283.4	-266.3	-247.6
	T1T9T3T2	-297.2	-282.2	-265.3	-246.9
T2	T1T2T4T7	-308.7	-293.2	-276.0	-257.4
	T1T2T7T4	-292.4	-277.6	-260.8	-242.4
	T1T4T2T7	-299.5	-284.6	-267.9	-249.5
	T1T4T7T2	-299.4	-285.9	-270.0	-252.2
	T1T7T2T4	-297.6	-283.4	-267.0	-248.8
	T1T7T4T2	-294.7	-280.1	-263.4	-245.1
T7	T2T3T5T6	-301.0	-286.7	-268.4	-250.2
	T2T3T6T5	-317.8	-307.4	-296.1	-283.8
	T2T5T3T6	-294.3	-280.0	-263.5	-245.3
	T2T5T6T3	-314.6	-299.5	-282.6	-264.1
	T2T6T3T5	-299.5	-284.1	-267.0	-248.3
	T2T6T5T3	-297.5	-283.2	-266.7	-248.5
T9	T1XT1YT5XT5Y	-321.2	-311.2	-300.1	-288.0
	T1XT1YT5YT5X	-303.2	-293.1	-283.8	-271.7
	T1XT5XT1YT5Y	-312.1	-303.3	-293.0	-281.5
	T1XT1YT5YT5X	-319.1	-308.2	-296.6	-284.2
	T1XT5YT1YT5X	-312.4	-302.8	-291.1	-278.7
	T1XT5YT5XT1Y	-322.0	-312.0	-300.9	-288.9

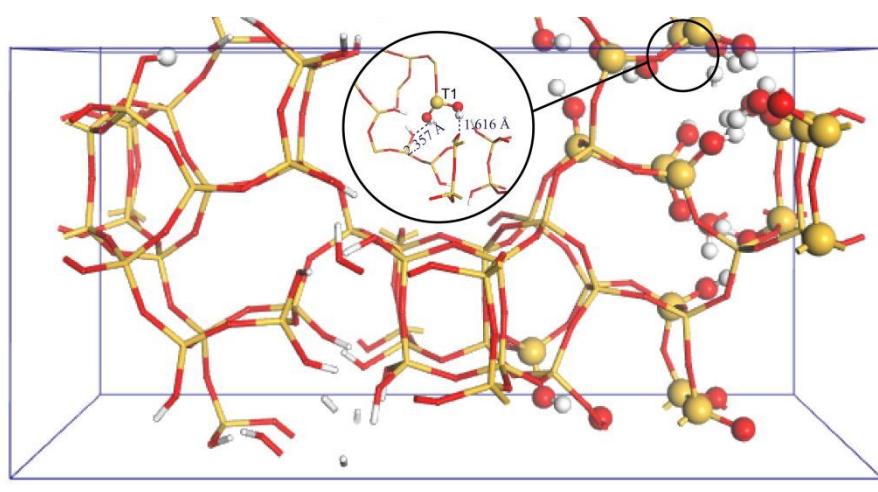
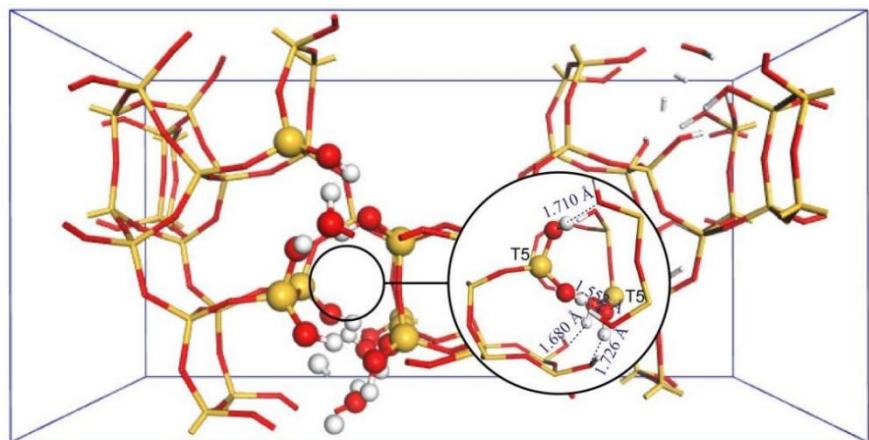


Fig. 9S. The dealuminized cells of (a)AlSiAl-T7T7T7T7T9T9 and (b)AlSiAl-T1T1T7T7T7T7T9T9. H, O and Si atoms are depicted as white, red and yellow spheres and sticks, respectively.

References

- [1] La Iglesia A, Aznar A. A method of estimating the Gibbs energies of formation of zeolites. *Zeolites* 1986;6(1):26-9.
- [2] Bonelli B, Onida B, Fubini B, Arean CO, Garrone E. Vibrational and thermodynamic study of the adsorption of carbon dioxide on the zeolite Na-ZSM-5. *Langmuir* 2000;16(11):4976-83.
- [3] Nguyen CM, Reyniers M-F, Marin GB. Adsorption thermodynamics of C1-C4 alcohols in H-FAU, H-MOR, H-ZSM-5, and H-ZSM-22. *J Catal* 2015;322:91-103.

CIF data

T7:

```
data_image0
  _chemical_formula_structural      Si63AlO128H
  _chemical_formula_sum            "Si63 Al1 O128 H1"
  _cell_length_a                  12.5348
  _cell_length_b                  12.5806
  _cell_length_c                  26.4552
  _cell_angle_alpha                90.0812
  _cell_angle_beta                 90.1547
  _cell_angle_gamma                90.2217
```

```
  _space_group_name_H-M_alt      "P 1"
  _space_group_IT_number          1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy
  Si  Si1      1.0  0.33262  0.78618  0.05798  1.0000
  Si  Si2      1.0  0.33734  0.53343  0.05428  1.0000
  Si  Si3      1.0  0.70799  0.79880  0.05478  1.0000
  Si  Si4      1.0  0.71324  0.54527  0.06182  1.0000
  Si  Si5      1.0  0.95291  0.80421  0.05316  1.0000
  Si  Si6      1.0  0.95821  0.54731  0.05654  1.0000
  Si  Si7      1.0  0.52982  0.85720  0.12685  1.0000
```

Si	Si8	1.0	0.66275	0.19887	0.54956	1.0000
Si	Si9	1.0	0.66632	0.45475	0.55907	1.0000
Si	Si10	1.0	0.27397	0.20635	0.56211	1.0000
Si	Si11	1.0	0.28518	0.46145	0.55652	1.0000
Si	Si12	1.0	0.02874	0.21290	0.55187	1.0000
Si	Si13	1.0	0.04213	0.47013	0.55176	1.0000
Si	Si14	1.0	0.20863	0.33890	0.30671	1.0000
Si	Si15	1.0	0.46152	0.34371	0.30504	1.0000
Si	Si16	1.0	0.20218	0.71219	0.30372	1.0000
Si	Si17	1.0	0.45864	0.71595	0.30742	1.0000
Si	Si18	1.0	0.19681	0.95371	0.30304	1.0000
Si	Si19	1.0	0.45511	0.95801	0.30726	1.0000
Si	Si20	1.0	0.13484	0.52796	0.37476	1.0000
Si	Si21	1.0	0.78999	0.66329	0.80894	1.0000
Si	Si22	1.0	0.53725	0.66077	0.80539	1.0000
Si	Si23	1.0	0.80141	0.28470	0.80947	1.0000
Si	Si24	1.0	0.54610	0.28407	0.80948	1.0000
Si	Si25	1.0	0.80175	0.03953	0.80489	1.0000
Si	Si26	1.0	0.54493	0.03992	0.80245	1.0000
Si	Si27	1.0	0.85539	0.46741	0.87869	1.0000
Si	Si28	1.0	0.67138	0.78469	0.94063	1.0000
Si	Si29	1.0	0.66596	0.52978	0.94747	1.0000
Si	Si30	1.0	0.29441	0.79262	0.94278	1.0000
Si	Si31	1.0	0.28771	0.54144	0.93928	1.0000
Si	Si32	1.0	0.05096	0.80110	0.94705	1.0000
Si	Si33	1.0	0.04398	0.54379	0.94736	1.0000
Si	Si34	1.0	0.47297	0.85188	0.87052	1.0000
Si	Si35	1.0	0.33348	0.20068	0.44843	1.0000
Si	Si36	1.0	0.32789	0.45428	0.44312	1.0000
Si	Si37	1.0	0.71239	0.21356	0.43520	1.0000
Si	Si38	1.0	0.70573	0.46539	0.44426	1.0000
Si	Si39	1.0	0.95925	0.21718	0.44027	1.0000
Si	Si40	1.0	0.95465	0.47048	0.44387	1.0000
Si	Si41	1.0	0.51905	0.14556	0.37598	1.0000

Si	Si42	1.0	0.79602	0.33933	0.69566	1.0000
Si	Si43	1.0	0.54445	0.34175	0.69528	1.0000
Si	Si44	1.0	0.79780	0.70931	0.69459	1.0000
Si	Si45	1.0	0.54386	0.70812	0.69229	1.0000
Si	Si46	1.0	0.80327	0.95171	0.69651	1.0000
Si	Si47	1.0	0.54459	0.95204	0.69371	1.0000
Si	Si48	1.0	0.86711	0.52392	0.62711	1.0000
Si	Si49	1.0	0.21240	0.66837	0.19099	1.0000
Si	Si50	1.0	0.46581	0.66726	0.19469	1.0000
Si	Si51	1.0	0.20366	0.28673	0.19216	1.0000
Si	Si52	1.0	0.45987	0.28629	0.19151	1.0000
Si	Si53	1.0	0.20357	0.04193	0.19470	1.0000
Si	Si54	1.0	0.46083	0.04263	0.19836	1.0000
Si	Si55	1.0	0.14892	0.47026	0.12243	1.0000
Si	Si56	1.0	0.13695	0.85818	0.12211	1.0000
Si	Si57	1.0	0.52606	0.47111	0.12575	1.0000
Si	Si58	1.0	0.84236	0.13741	0.62525	1.0000
Si	Si59	1.0	0.46814	0.52402	0.62705	1.0000
Si	Si60	1.0	0.15162	0.13694	0.37565	1.0000
Si	Si61	1.0	0.52609	0.52803	0.37476	1.0000
Si	Si62	1.0	0.86862	0.85471	0.87545	1.0000
Si	Si63	1.0	0.47442	0.46668	0.87644	1.0000
Al	Al1	1.0	0.46601	0.13766	0.62713	1.0000
O	O1	1.0	0.32691	0.65887	0.06946	1.0000
O	O2	1.0	0.34968	0.80708	0.99816	1.0000
O	O3	1.0	0.22138	0.83981	0.07623	1.0000
O	O4	1.0	0.43101	0.84008	0.08807	1.0000
O	O5	1.0	0.34315	0.51808	0.99377	1.0000
O	O6	1.0	0.23381	0.46979	0.07591	1.0000
O	O7	1.0	0.44630	0.48583	0.07787	1.0000
O	O8	1.0	0.70369	0.67310	0.06824	1.0000
O	O9	1.0	0.82985	0.84124	0.05672	1.0000
O	O10	1.0	0.64107	0.86503	0.09630	1.0000
O	O11	1.0	0.83663	0.50788	0.06596	1.0000

O	O12	1.0	0.64790	0.49050	0.10770	1.0000
O	O13	1.0	0.96428	0.67605	0.05778	1.0000
O	O14	1.0	0.01684	0.85955	0.09955	1.0000
O	O15	1.0	0.03115	0.49951	0.10170	1.0000
O	O16	1.0	0.67415	0.32465	0.56003	1.0000
O	O17	1.0	0.67757	0.16801	0.49076	1.0000
O	O18	1.0	0.74157	0.13236	0.58540	1.0000
O	O19	1.0	0.53678	0.15884	0.56348	1.0000
O	O20	1.0	0.66549	0.49442	0.50079	1.0000
O	O21	1.0	0.76964	0.50333	0.58744	1.0000
O	O22	1.0	0.55665	0.49239	0.58465	1.0000
O	O23	1.0	0.28060	0.33486	0.56682	1.0000
O	O24	1.0	0.14967	0.16887	0.55835	1.0000
O	O25	1.0	0.33546	0.15057	0.60751	1.0000
O	O26	1.0	0.16514	0.50782	0.55556	1.0000
O	O27	1.0	0.35118	0.52039	0.60083	1.0000
O	O28	1.0	0.02848	0.34168	0.55461	1.0000
O	O29	1.0	0.95193	0.16598	0.59567	1.0000
O	O30	1.0	0.98001	0.52469	0.59802	1.0000
O	O31	1.0	0.33481	0.37001	0.31070	1.0000
O	O32	1.0	0.17174	0.33104	0.24802	1.0000
O	O33	1.0	0.18806	0.22523	0.33423	1.0000
O	O34	1.0	0.14018	0.43160	0.33378	1.0000
O	O35	1.0	0.49479	0.33434	0.24623	1.0000
O	O36	1.0	0.48659	0.23169	0.33314	1.0000
O	O37	1.0	0.53032	0.44057	0.32935	1.0000
O	O38	1.0	0.33015	0.71355	0.31060	1.0000
O	O39	1.0	0.15572	0.83196	0.30833	1.0000
O	O40	1.0	0.15044	0.64197	0.34813	1.0000
O	O41	1.0	0.49988	0.83784	0.31329	1.0000
O	O42	1.0	0.50587	0.64647	0.35349	1.0000
O	O43	1.0	0.32586	0.95993	0.30731	1.0000
O	O44	1.0	0.14407	0.02177	0.34856	1.0000
O	O45	1.0	0.49829	0.02663	0.35501	1.0000

O	O46	1.0	0.66311	0.68683	0.81612	1.0000
O	O47	1.0	0.81995	0.65559	0.74950	1.0000
O	O48	1.0	0.85707	0.76077	0.83358	1.0000
O	O49	1.0	0.82120	0.55188	0.83528	1.0000
O	O50	1.0	0.51629	0.64814	0.74524	1.0000
O	O51	1.0	0.46744	0.75877	0.82771	1.0000
O	O52	1.0	0.50210	0.55065	0.83188	1.0000
O	O53	1.0	0.67396	0.29746	0.81784	1.0000
O	O54	1.0	0.83716	0.16174	0.81432	1.0000
O	O55	1.0	0.86435	0.35075	0.85302	1.0000
O	O56	1.0	0.51073	0.16095	0.81461	1.0000
O	O57	1.0	0.48566	0.34755	0.85425	1.0000
O	O58	1.0	0.67329	0.02562	0.80718	1.0000
O	O59	1.0	0.85542	0.96979	0.84939	1.0000
O	O60	1.0	0.48834	0.96658	0.84470	1.0000
O	O61	1.0	0.68167	0.65603	0.93582	1.0000
O	O62	1.0	0.65550	0.81858	0.99937	1.0000
O	O63	1.0	0.78066	0.83838	0.91995	1.0000
O	O64	1.0	0.56961	0.82691	0.90952	1.0000
O	O65	1.0	0.66260	0.50859	0.00791	1.0000
O	O66	1.0	0.76641	0.46616	0.92344	1.0000
O	O67	1.0	0.55457	0.48670	0.92402	1.0000
O	O68	1.0	0.29356	0.66776	0.92715	1.0000
O	O69	1.0	0.17420	0.83909	0.94355	1.0000
O	O70	1.0	0.36164	0.85814	0.90127	1.0000
O	O71	1.0	0.16472	0.50089	0.93941	1.0000
O	O72	1.0	0.35218	0.47855	0.89571	1.0000
O	O73	1.0	0.04179	0.67247	0.94542	1.0000
O	O74	1.0	0.98736	0.85161	0.89964	1.0000
O	O75	1.0	0.97113	0.49658	0.90213	1.0000
O	O76	1.0	0.31173	0.32589	0.43760	1.0000
O	O77	1.0	0.33853	0.17500	0.50897	1.0000
O	O78	1.0	0.23920	0.13229	0.42146	1.0000
O	O79	1.0	0.44992	0.16613	0.42731	1.0000

O	O80	1.0	0.34189	0.48522	0.50223	1.0000
O	O81	1.0	0.22371	0.51125	0.41907	1.0000
O	O82	1.0	0.43448	0.49249	0.41442	1.0000
O	O83	1.0	0.68583	0.33942	0.43361	1.0000
O	O84	1.0	0.83688	0.18940	0.42500	1.0000
O	O85	1.0	0.64429	0.15429	0.39135	1.0000
O	O86	1.0	0.82961	0.49527	0.43696	1.0000
O	O87	1.0	0.63998	0.53396	0.40339	1.0000
O	O88	1.0	0.97983	0.34433	0.43875	1.0000
O	O89	1.0	0.03505	0.16156	0.39879	1.0000
O	O90	1.0	0.01694	0.53228	0.39933	1.0000
O	O91	1.0	0.67146	0.37380	0.69111	1.0000
O	O92	1.0	0.83355	0.33031	0.75409	1.0000
O	O93	1.0	0.81589	0.22535	0.66810	1.0000
O	O94	1.0	0.86882	0.43032	0.66928	1.0000
O	O95	1.0	0.51228	0.32997	0.75455	1.0000
O	O96	1.0	0.52259	0.23547	0.66364	1.0000
O	O97	1.0	0.47484	0.44127	0.67377	1.0000
O	O98	1.0	0.67139	0.70631	0.68214	1.0000
O	O99	1.0	0.84438	0.82977	0.69181	1.0000
O	O100	1.0	0.85859	0.64034	0.65218	1.0000
O	O101	1.0	0.50252	0.82929	0.69415	1.0000
O	O102	1.0	0.48552	0.64496	0.64644	1.0000
O	O103	1.0	0.67475	0.95479	0.69349	1.0000
O	O104	1.0	0.85491	0.02109	0.65058	1.0000
O	O105	1.0	0.49817	0.01169	0.64532	1.0000
O	O106	1.0	0.33954	0.69630	0.18899	1.0000
O	O107	1.0	0.17229	0.66015	0.24920	1.0000
O	O108	1.0	0.14777	0.76313	0.16337	1.0000
O	O109	1.0	0.18891	0.55471	0.16494	1.0000
O	O110	1.0	0.49826	0.66497	0.25417	1.0000
O	O111	1.0	0.53521	0.75840	0.16645	1.0000
O	O112	1.0	0.49149	0.55156	0.17104	1.0000
O	O113	1.0	0.33171	0.29733	0.18443	1.0000

O	O114	1.0	0.16670	0.16383	0.18643	1.0000
O	O115	1.0	0.14257	0.35396	0.14874	1.0000
O	O116	1.0	0.49730	0.16373	0.18736	1.0000
O	O117	1.0	0.51958	0.35058	0.14694	1.0000
O	O118	1.0	0.33234	0.03124	0.19438	1.0000
O	O119	1.0	0.15545	0.97248	0.14865	1.0000
O	O120	1.0	0.51691	0.96835	0.15663	1.0000
O	O121	1.0	0.00113	0.84444	0.99969	1.0000
O	O122	1.0	0.99964	0.50407	0.00204	1.0000
O	O123	1.0	0.98296	0.17365	0.49706	1.0000
O	O124	1.0	0.99304	0.51289	0.49876	1.0000
O	O125	1.0	0.15827	0.00015	0.24871	1.0000
O	O126	1.0	0.49941	0.00878	0.25487	1.0000
O	O127	1.0	0.84481	0.00075	0.75000	1.0000
O	O128	1.0	0.50471	0.00776	0.74622	1.0000
H	H1	1.0	0.48470	0.15587	0.53526	1.0000

T7T7:

```
data_image0
  _chemical_formula_structural      H2O128Al2Si62
  _chemical_formula_sum           "H2 O128 Al2 Si62"
  _cell_length_a          12.5747
  _cell_length_b          12.5366
  _cell_length_c          26.4409
  _cell_angle_alpha        90.2269
  _cell_angle_beta         90.1577
  _cell_angle_gamma        90.4528
```

```
  _space_group_name_H-M_alt    "P 1"
  _space_group_IT_number       1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy
    H   H1        1.0  0.48371  0.14385  0.53286  1.0000
    H   H2        1.0  0.85422  0.51338  0.71698  1.0000
    O   O1        1.0  0.31719  0.65725  0.06735  1.0000
    O   O2        1.0  0.34349  0.81185  0.99920  1.0000
    O   O3        1.0  0.22581  0.84419  0.08034  1.0000
    O   O4        1.0  0.43617  0.82989  0.08685  1.0000
    O   O5        1.0  0.33823  0.51085  0.99401  1.0000
    O   O6        1.0  0.23453  0.46400  0.07800  1.0000
```

O	O7	1.0	0.44553	0.48982	0.07716	1.0000
O	O8	1.0	0.70074	0.67152	0.06449	1.0000
O	O9	1.0	0.83249	0.83707	0.05882	1.0000
O	O10	1.0	0.64313	0.86260	0.09683	1.0000
O	O11	1.0	0.83528	0.50689	0.06479	1.0000
O	O12	1.0	0.64706	0.48720	0.10470	1.0000
O	O13	1.0	0.96776	0.67220	0.05750	1.0000
O	O14	1.0	0.01980	0.85533	0.10029	1.0000
O	O15	1.0	0.02969	0.49125	0.09897	1.0000
O	O16	1.0	0.63755	0.32723	0.55368	1.0000
O	O17	1.0	0.68467	0.16670	0.49052	1.0000
O	O18	1.0	0.74031	0.15361	0.58781	1.0000
O	O19	1.0	0.53772	0.14152	0.56039	1.0000
O	O20	1.0	0.67564	0.50282	0.50134	1.0000
O	O21	1.0	0.76999	0.47126	0.59104	1.0000
O	O22	1.0	0.56129	0.51318	0.58302	1.0000
O	O23	1.0	0.28231	0.33022	0.56760	1.0000
O	O24	1.0	0.15402	0.15932	0.55569	1.0000
O	O25	1.0	0.33610	0.14428	0.60626	1.0000
O	O26	1.0	0.17071	0.50297	0.55190	1.0000
O	O27	1.0	0.35361	0.51650	0.60196	1.0000
O	O28	1.0	0.03836	0.33316	0.55254	1.0000
O	O29	1.0	0.95447	0.15542	0.59091	1.0000
O	O30	1.0	0.99538	0.50576	0.60608	1.0000
O	O31	1.0	0.33925	0.37525	0.31176	1.0000
O	O32	1.0	0.17390	0.33880	0.25061	1.0000
O	O33	1.0	0.19857	0.22233	0.33310	1.0000
O	O34	1.0	0.14447	0.42734	0.34010	1.0000
O	O35	1.0	0.49569	0.33767	0.24559	1.0000
O	O36	1.0	0.48800	0.23257	0.33192	1.0000
O	O37	1.0	0.53670	0.44114	0.32930	1.0000
O	O38	1.0	0.33403	0.71155	0.31238	1.0000
O	O39	1.0	0.16052	0.82968	0.30967	1.0000
O	O40	1.0	0.15446	0.63941	0.34931	1.0000

O	O41	1.0	0.50297	0.83709	0.31226	1.0000
O	O42	1.0	0.51143	0.64683	0.35409	1.0000
O	O43	1.0	0.32958	0.96015	0.30796	1.0000
O	O44	1.0	0.14769	0.02053	0.34951	1.0000
O	O45	1.0	0.50673	0.02759	0.35211	1.0000
O	O46	1.0	0.67338	0.68181	0.81541	1.0000
O	O47	1.0	0.82197	0.65387	0.74231	1.0000
O	O48	1.0	0.86668	0.76004	0.82712	1.0000
O	O49	1.0	0.83650	0.54773	0.82529	1.0000
O	O50	1.0	0.52152	0.64651	0.74755	1.0000
O	O51	1.0	0.48083	0.75961	0.83096	1.0000
O	O52	1.0	0.50930	0.55142	0.83482	1.0000
O	O53	1.0	0.66198	0.32046	0.81454	1.0000
O	O54	1.0	0.79846	0.15833	0.82649	1.0000
O	O55	1.0	0.84919	0.35043	0.85743	1.0000
O	O56	1.0	0.52179	0.16128	0.81780	1.0000
O	O57	1.0	0.46683	0.34799	0.84850	1.0000
O	O58	1.0	0.65820	0.00037	0.80942	1.0000
O	O59	1.0	0.84237	0.96369	0.85274	1.0000
O	O60	1.0	0.46451	0.96928	0.84195	1.0000
O	O61	1.0	0.63130	0.66027	0.93704	1.0000
O	O62	1.0	0.66245	0.82627	0.99854	1.0000
O	O63	1.0	0.77857	0.80723	0.91576	1.0000
O	O64	1.0	0.57246	0.85516	0.90998	1.0000
O	O65	1.0	0.66500	0.50535	0.00479	1.0000
O	O66	1.0	0.76398	0.50149	0.91722	1.0000
O	O67	1.0	0.55438	0.46483	0.92298	1.0000
O	O68	1.0	0.28534	0.66631	0.93112	1.0000
O	O69	1.0	0.17053	0.84090	0.94195	1.0000
O	O70	1.0	0.36057	0.85112	0.90194	1.0000
O	O71	1.0	0.16138	0.49589	0.93830	1.0000
O	O72	1.0	0.35059	0.48380	0.89522	1.0000
O	O73	1.0	0.04147	0.67070	0.94443	1.0000
O	O74	1.0	0.98214	0.84973	0.89996	1.0000

O	O75	1.0	0.97052	0.49566	0.89934	1.0000
O	O76	1.0	0.31749	0.32570	0.43660	1.0000
O	O77	1.0	0.34392	0.17385	0.50814	1.0000
O	O78	1.0	0.23762	0.13377	0.42272	1.0000
O	O79	1.0	0.44998	0.16205	0.42521	1.0000
O	O80	1.0	0.35352	0.47948	0.50390	1.0000
O	O81	1.0	0.23703	0.51635	0.42117	1.0000
O	O82	1.0	0.44523	0.49056	0.41583	1.0000
O	O83	1.0	0.69539	0.34264	0.43618	1.0000
O	O84	1.0	0.84016	0.18858	0.42317	1.0000
O	O85	1.0	0.64588	0.16047	0.39114	1.0000
O	O86	1.0	0.83666	0.50178	0.43582	1.0000
O	O87	1.0	0.64799	0.53537	0.40292	1.0000
O	O88	1.0	0.98011	0.34573	0.44042	1.0000
O	O89	1.0	0.03739	0.16871	0.39456	1.0000
O	O90	1.0	0.02970	0.53613	0.40708	1.0000
O	O91	1.0	0.67248	0.35917	0.69674	1.0000
O	O92	1.0	0.83478	0.30956	0.75825	1.0000
O	O93	1.0	0.84415	0.25705	0.66061	1.0000
O	O94	1.0	0.49932	0.31698	0.74995	1.0000
O	O95	1.0	0.52660	0.23055	0.65810	1.0000
O	O96	1.0	0.48681	0.43949	0.67056	1.0000
O	O97	1.0	0.66798	0.71692	0.68215	1.0000
O	O98	1.0	0.83896	0.84457	0.69483	1.0000
O	O99	1.0	0.85395	0.66176	0.64436	1.0000
O	O100	1.0	0.49811	0.83094	0.70074	1.0000
O	O101	1.0	0.47994	0.64733	0.65019	1.0000
O	O102	1.0	0.66735	0.96342	0.69531	1.0000
O	O103	1.0	0.84547	0.04222	0.65602	1.0000
O	O104	1.0	0.49201	0.00349	0.64415	1.0000
O	O105	1.0	0.34065	0.69115	0.18784	1.0000
O	O106	1.0	0.17732	0.65669	0.25051	1.0000
O	O107	1.0	0.15154	0.77015	0.16780	1.0000
O	O108	1.0	0.18007	0.55987	0.16319	1.0000

O	O109	1.0	0.49792	0.66110	0.25457	1.0000
O	O110	1.0	0.53506	0.76346	0.16936	1.0000
O	O111	1.0	0.49766	0.55415	0.16968	1.0000
O	O112	1.0	0.33035	0.30090	0.18554	1.0000
O	O113	1.0	0.16692	0.16645	0.19129	1.0000
O	O114	1.0	0.13957	0.35472	0.15171	1.0000
O	O115	1.0	0.49394	0.16513	0.18715	1.0000
O	O116	1.0	0.51630	0.35131	0.14577	1.0000
O	O117	1.0	0.33057	0.03003	0.19287	1.0000
O	O118	1.0	0.14900	0.97840	0.14961	1.0000
O	O119	1.0	0.51360	0.97145	0.15286	1.0000
O	O120	1.0	0.00071	0.84217	0.00004	1.0000
O	O121	1.0	0.99481	0.50107	0.99961	1.0000
O	O122	1.0	0.98957	0.16724	0.49325	1.0000
O	O123	1.0	0.98658	0.50944	0.50515	1.0000
O	O124	1.0	0.16074	0.99708	0.24986	1.0000
O	O125	1.0	0.49914	0.00496	0.25203	1.0000
O	O126	1.0	0.83296	0.01523	0.75422	1.0000
O	O127	1.0	0.49542	0.01917	0.74491	1.0000
O	O128	1.0	0.85733	0.45947	0.68935	1.0000
Al	Al1	1.0	0.46667	0.12977	0.62390	1.0000
Al	Al2	1.0	0.86929	0.53126	0.62605	1.0000
Si	Si1	1.0	0.33087	0.78545	0.05880	1.0000
Si	Si2	1.0	0.33375	0.53099	0.05442	1.0000
Si	Si3	1.0	0.70975	0.79884	0.05429	1.0000
Si	Si4	1.0	0.71247	0.54322	0.05927	1.0000
Si	Si5	1.0	0.95507	0.80076	0.05394	1.0000
Si	Si6	1.0	0.95725	0.54329	0.05502	1.0000
Si	Si7	1.0	0.53099	0.85642	0.12661	1.0000
Si	Si8	1.0	0.65642	0.20143	0.54788	1.0000
Si	Si9	1.0	0.66394	0.45578	0.55843	1.0000
Si	Si10	1.0	0.27632	0.20165	0.56098	1.0000
Si	Si11	1.0	0.28984	0.45713	0.55664	1.0000
Si	Si12	1.0	0.03422	0.20497	0.54856	1.0000

Si	Si13	1.0	0.04739	0.46312	0.55516	1.0000
Si	Si14	1.0	0.21381	0.34083	0.30913	1.0000
Si	Si15	1.0	0.46477	0.34621	0.30485	1.0000
Si	Si16	1.0	0.20656	0.70965	0.30516	1.0000
Si	Si17	1.0	0.46191	0.71435	0.30804	1.0000
Si	Si18	1.0	0.20074	0.95212	0.30415	1.0000
Si	Si19	1.0	0.45849	0.95739	0.30579	1.0000
Si	Si20	1.0	0.14310	0.52827	0.37922	1.0000
Si	Si21	1.0	0.79839	0.66186	0.80304	1.0000
Si	Si22	1.0	0.54581	0.66016	0.80735	1.0000
Si	Si23	1.0	0.78540	0.28354	0.81424	1.0000
Si	Si24	1.0	0.53722	0.28657	0.80663	1.0000
Si	Si25	1.0	0.78308	0.03428	0.81025	1.0000
Si	Si26	1.0	0.53495	0.03768	0.80262	1.0000
Si	Si27	1.0	0.85396	0.47440	0.87546	1.0000
Si	Si28	1.0	0.66131	0.78713	0.93993	1.0000
Si	Si29	1.0	0.65399	0.53343	0.94528	1.0000
Si	Si30	1.0	0.28956	0.79243	0.94396	1.0000
Si	Si31	1.0	0.28344	0.53893	0.94003	1.0000
Si	Si32	1.0	0.04845	0.79999	0.94668	1.0000
Si	Si33	1.0	0.04191	0.54147	0.94565	1.0000
Si	Si34	1.0	0.47120	0.85712	0.87140	1.0000
Si	Si35	1.0	0.33618	0.19977	0.44766	1.0000
Si	Si36	1.0	0.33816	0.45369	0.44429	1.0000
Si	Si37	1.0	0.71733	0.21565	0.43522	1.0000
Si	Si38	1.0	0.71393	0.47022	0.44499	1.0000
Si	Si39	1.0	0.96221	0.21785	0.43824	1.0000
Si	Si40	1.0	0.95856	0.47255	0.44793	1.0000
Si	Si41	1.0	0.52227	0.14672	0.37457	1.0000
Si	Si42	1.0	0.54401	0.33390	0.69265	1.0000
Si	Si43	1.0	0.79607	0.72201	0.68943	1.0000
Si	Si44	1.0	0.54202	0.71086	0.69487	1.0000
Si	Si45	1.0	0.79512	0.96593	0.69969	1.0000
Si	Si46	1.0	0.53775	0.95431	0.69503	1.0000

Si	Si47	1.0	0.21285	0.66898	0.19184	1.0000
Si	Si48	1.0	0.46724	0.66727	0.19503	1.0000
Si	Si49	1.0	0.20317	0.29026	0.19515	1.0000
Si	Si50	1.0	0.45819	0.28843	0.19138	1.0000
Si	Si51	1.0	0.20255	0.04329	0.19617	1.0000
Si	Si52	1.0	0.45874	0.04255	0.19647	1.0000
Si	Si53	1.0	0.14585	0.46831	0.12277	1.0000
Si	Si54	1.0	0.13785	0.86096	0.12462	1.0000
Si	Si55	1.0	0.52614	0.47170	0.12433	1.0000
Si	Si56	1.0	0.84643	0.15170	0.62384	1.0000
Si	Si57	1.0	0.47159	0.52790	0.62643	1.0000
Si	Si58	1.0	0.15488	0.13791	0.37506	1.0000
Si	Si59	1.0	0.53381	0.52824	0.37521	1.0000
Si	Si60	1.0	0.86562	0.84537	0.87393	1.0000
Si	Si61	1.0	0.47065	0.46354	0.87574	1.0000
Si	Si62	1.0	0.79801	0.34005	0.70147	1.0000

T7T9:

```
data_image0
  _chemical_formula_structural      H2O128Al2Si62
  _chemical_formula_sum           "H2 O128 Al2 Si62"
  _cell_length_a          12.5379
  _cell_length_b          12.5635
  _cell_length_c          26.4815
  _cell_angle_alpha        90.0682
  _cell_angle_beta         90.2064
  _cell_angle_gamma        90.1846

  _space_group_name_H-M_alt    "P 1"
  _space_group_IT_number       1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy

    H   H1        1.0  0.48048  0.15949  0.53755  1.0000
    H   H2        1.0  0.06614  0.97576  0.35812  1.0000
    O   O1        1.0  0.33116  0.65921  0.06937  1.0000
    O   O2        1.0  0.35025  0.80815  0.99800  1.0000
    O   O3        1.0  0.22093  0.83740  0.07594  1.0000
    O   O4        1.0  0.43013  0.84315  0.08837  1.0000
    O   O5        1.0  0.34819  0.52027  0.99302  1.0000
    O   O6        1.0  0.23224  0.47148  0.07216  1.0000
```

O	O7	1.0	0.44436	0.48307	0.07948	1.0000
O	O8	1.0	0.70069	0.67283	0.06782	1.0000
O	O9	1.0	0.83054	0.83846	0.05813	1.0000
O	O10	1.0	0.64078	0.86558	0.09634	1.0000
O	O11	1.0	0.83507	0.50814	0.06542	1.0000
O	O12	1.0	0.64717	0.49007	0.10760	1.0000
O	O13	1.0	0.96676	0.67376	0.05842	1.0000
O	O14	1.0	0.01740	0.85712	0.10075	1.0000
O	O15	1.0	0.02953	0.49235	0.09957	1.0000
O	O16	1.0	0.67180	0.32623	0.56021	1.0000
O	O17	1.0	0.66981	0.16986	0.49073	1.0000
O	O18	1.0	0.74245	0.13441	0.58413	1.0000
O	O19	1.0	0.53500	0.16008	0.56516	1.0000
O	O20	1.0	0.66830	0.49649	0.50090	1.0000
O	O21	1.0	0.76963	0.50353	0.58801	1.0000
O	O22	1.0	0.55650	0.49597	0.58389	1.0000
O	O23	1.0	0.27850	0.33726	0.56718	1.0000
O	O24	1.0	0.15067	0.16915	0.55859	1.0000
O	O25	1.0	0.33471	0.15567	0.61039	1.0000
O	O26	1.0	0.16454	0.51065	0.55425	1.0000
O	O27	1.0	0.35045	0.52282	0.60041	1.0000
O	O28	1.0	0.03026	0.34219	0.55495	1.0000
O	O29	1.0	0.95299	0.16755	0.59686	1.0000
O	O30	1.0	0.98027	0.52528	0.59789	1.0000
O	O31	1.0	0.33708	0.37613	0.30847	1.0000
O	O32	1.0	0.17443	0.34031	0.24558	1.0000
O	O33	1.0	0.19718	0.21953	0.32735	1.0000
O	O34	1.0	0.14115	0.42516	0.33474	1.0000
O	O35	1.0	0.49894	0.33226	0.24645	1.0000
O	O36	1.0	0.48274	0.23182	0.33362	1.0000
O	O37	1.0	0.53416	0.43938	0.32925	1.0000
O	O38	1.0	0.32810	0.71195	0.30776	1.0000
O	O39	1.0	0.15179	0.82418	0.30424	1.0000
O	O40	1.0	0.14995	0.63659	0.34676	1.0000

O	O41	1.0	0.49425	0.83781	0.31624	1.0000
O	O42	1.0	0.50015	0.64359	0.35366	1.0000
O	O43	1.0	0.32016	0.96042	0.30980	1.0000
O	O44	1.0	0.49205	0.02832	0.35743	1.0000
O	O45	1.0	0.66382	0.68920	0.81692	1.0000
O	O46	1.0	0.81884	0.65682	0.74951	1.0000
O	O47	1.0	0.85916	0.76009	0.83404	1.0000
O	O48	1.0	0.82050	0.55180	0.83490	1.0000
O	O49	1.0	0.51837	0.64787	0.74560	1.0000
O	O50	1.0	0.46776	0.76030	0.82754	1.0000
O	O51	1.0	0.50314	0.55197	0.83211	1.0000
O	O52	1.0	0.67395	0.29905	0.81814	1.0000
O	O53	1.0	0.83625	0.16221	0.81443	1.0000
O	O54	1.0	0.86458	0.35108	0.85306	1.0000
O	O55	1.0	0.51110	0.16225	0.81368	1.0000
O	O56	1.0	0.48498	0.34809	0.85412	1.0000
O	O57	1.0	0.67307	0.02551	0.80697	1.0000
O	O58	1.0	0.85604	0.96971	0.84847	1.0000
O	O59	1.0	0.48891	0.96826	0.84544	1.0000
O	O60	1.0	0.68181	0.65681	0.93676	1.0000
O	O61	1.0	0.65730	0.82099	0.99943	1.0000
O	O62	1.0	0.77845	0.83997	0.91893	1.0000
O	O63	1.0	0.56699	0.82634	0.91053	1.0000
O	O64	1.0	0.66126	0.50741	0.00772	1.0000
O	O65	1.0	0.76857	0.46803	0.92370	1.0000
O	O66	1.0	0.55581	0.48637	0.92355	1.0000
O	O67	1.0	0.29191	0.66912	0.92717	1.0000
O	O68	1.0	0.17372	0.84098	0.94427	1.0000
O	O69	1.0	0.36025	0.85936	0.90088	1.0000
O	O70	1.0	0.16591	0.50112	0.94066	1.0000
O	O71	1.0	0.35254	0.48035	0.89535	1.0000
O	O72	1.0	0.04290	0.67316	0.94533	1.0000
O	O73	1.0	0.98593	0.85347	0.90095	1.0000
O	O74	1.0	0.97312	0.49798	0.90074	1.0000

O	O75	1.0	0.30716	0.32330	0.44010	1.0000
O	O76	1.0	0.34374	0.17609	0.51201	1.0000
O	O77	1.0	0.24774	0.12404	0.42400	1.0000
O	O78	1.0	0.45492	0.17285	0.42990	1.0000
O	O79	1.0	0.34283	0.48627	0.50220	1.0000
O	O80	1.0	0.22604	0.51092	0.41868	1.0000
O	O81	1.0	0.43542	0.48495	0.41420	1.0000
O	O82	1.0	0.68313	0.34113	0.43336	1.0000
O	O83	1.0	0.83243	0.18882	0.42773	1.0000
O	O84	1.0	0.64354	0.15533	0.39051	1.0000
O	O85	1.0	0.82943	0.49529	0.43532	1.0000
O	O86	1.0	0.63879	0.53694	0.40393	1.0000
O	O87	1.0	0.97793	0.34193	0.43924	1.0000
O	O88	1.0	0.02730	0.15473	0.39962	1.0000
O	O89	1.0	0.01849	0.52936	0.39959	1.0000
O	O90	1.0	0.67179	0.37684	0.69120	1.0000
O	O91	1.0	0.83321	0.33060	0.75405	1.0000
O	O92	1.0	0.81357	0.22578	0.66800	1.0000
O	O93	1.0	0.86998	0.43023	0.66932	1.0000
O	O94	1.0	0.51283	0.33421	0.75483	1.0000
O	O95	1.0	0.52609	0.23327	0.66594	1.0000
O	O96	1.0	0.47409	0.43942	0.67216	1.0000
O	O97	1.0	0.67127	0.70635	0.68155	1.0000
O	O98	1.0	0.84342	0.83066	0.69164	1.0000
O	O99	1.0	0.85933	0.64058	0.65249	1.0000
O	O100	1.0	0.50202	0.82886	0.69473	1.0000
O	O101	1.0	0.48443	0.64496	0.64713	1.0000
O	O102	1.0	0.67338	0.95540	0.69353	1.0000
O	O103	1.0	0.85276	0.02163	0.64987	1.0000
O	O104	1.0	0.49545	0.01115	0.64586	1.0000
O	O105	1.0	0.34085	0.69185	0.18930	1.0000
O	O106	1.0	0.17129	0.65069	0.24722	1.0000
O	O107	1.0	0.15269	0.76880	0.16567	1.0000
O	O108	1.0	0.18713	0.55799	0.16003	1.0000

O	O109	1.0	0.50109	0.66862	0.25420	1.0000
O	O110	1.0	0.53585	0.75252	0.16422	1.0000
O	O111	1.0	0.49296	0.54673	0.17289	1.0000
O	O112	1.0	0.33554	0.29323	0.18470	1.0000
O	O113	1.0	0.16682	0.16581	0.18773	1.0000
O	O114	1.0	0.14953	0.35326	0.14617	1.0000
O	O115	1.0	0.50106	0.16034	0.18846	1.0000
O	O116	1.0	0.52271	0.34697	0.14704	1.0000
O	O117	1.0	0.33256	0.03150	0.19441	1.0000
O	O118	1.0	0.15698	0.97623	0.14625	1.0000
O	O119	1.0	0.51776	0.96283	0.15986	1.0000
O	O120	1.0	0.00145	0.84351	0.00080	1.0000
O	O121	1.0	0.99629	0.50370	0.00044	1.0000
O	O122	1.0	0.98100	0.17308	0.49844	1.0000
O	O123	1.0	0.99018	0.51206	0.49867	1.0000
O	O124	1.0	0.15705	0.99642	0.24632	1.0000
O	O125	1.0	0.49458	0.00761	0.25725	1.0000
O	O126	1.0	0.84414	0.00244	0.74930	1.0000
O	O127	1.0	0.50336	0.00701	0.74669	1.0000
O	O128	1.0	0.13222	0.00858	0.34639	1.0000
Al	Al1	1.0	0.46579	0.13871	0.62868	1.0000
Al	Al2	1.0	0.15439	0.14236	0.37700	1.0000
Si	Si1	1.0	0.33369	0.78669	0.05774	1.0000
Si	Si2	1.0	0.33914	0.53372	0.05353	1.0000
Si	Si3	1.0	0.70785	0.79885	0.05494	1.0000
Si	Si4	1.0	0.71155	0.54493	0.06151	1.0000
Si	Si5	1.0	0.95373	0.80205	0.05407	1.0000
Si	Si6	1.0	0.95703	0.54500	0.05548	1.0000
Si	Si7	1.0	0.52997	0.85534	0.12702	1.0000
Si	Si8	1.0	0.65988	0.20024	0.54975	1.0000
Si	Si9	1.0	0.66634	0.45645	0.55907	1.0000
Si	Si10	1.0	0.27440	0.20829	0.56368	1.0000
Si	Si11	1.0	0.28445	0.46351	0.55616	1.0000
Si	Si12	1.0	0.02928	0.21310	0.55237	1.0000

Si	Si13	1.0	0.04191	0.47073	0.55143	1.0000
Si	Si14	1.0	0.21208	0.33719	0.30473	1.0000
Si	Si15	1.0	0.46261	0.34426	0.30483	1.0000
Si	Si16	1.0	0.20072	0.70347	0.30140	1.0000
Si	Si17	1.0	0.45692	0.71500	0.30756	1.0000
Si	Si18	1.0	0.45106	0.95859	0.30995	1.0000
Si	Si19	1.0	0.13584	0.52276	0.37478	1.0000
Si	Si20	1.0	0.79028	0.66414	0.80899	1.0000
Si	Si21	1.0	0.53828	0.66216	0.80564	1.0000
Si	Si22	1.0	0.80118	0.28546	0.80945	1.0000
Si	Si23	1.0	0.54626	0.28569	0.80925	1.0000
Si	Si24	1.0	0.80142	0.03996	0.80435	1.0000
Si	Si25	1.0	0.54475	0.04050	0.80245	1.0000
Si	Si26	1.0	0.85632	0.46818	0.87838	1.0000
Si	Si27	1.0	0.67064	0.78566	0.94073	1.0000
Si	Si28	1.0	0.66657	0.52991	0.94739	1.0000
Si	Si29	1.0	0.29383	0.79412	0.94274	1.0000
Si	Si30	1.0	0.28870	0.54254	0.93926	1.0000
Si	Si31	1.0	0.05075	0.80199	0.94769	1.0000
Si	Si32	1.0	0.04457	0.54425	0.94673	1.0000
Si	Si33	1.0	0.47227	0.85291	0.87064	1.0000
Si	Si34	1.0	0.33519	0.19798	0.45081	1.0000
Si	Si35	1.0	0.32801	0.45119	0.44364	1.0000
Si	Si36	1.0	0.70834	0.21469	0.43569	1.0000
Si	Si37	1.0	0.70561	0.46676	0.44407	1.0000
Si	Si38	1.0	0.95659	0.21397	0.44098	1.0000
Si	Si39	1.0	0.95384	0.46817	0.44367	1.0000
Si	Si40	1.0	0.51701	0.14822	0.37734	1.0000
Si	Si41	1.0	0.79583	0.34017	0.69560	1.0000
Si	Si42	1.0	0.54533	0.34278	0.69548	1.0000
Si	Si43	1.0	0.79748	0.70987	0.69438	1.0000
Si	Si44	1.0	0.54411	0.70794	0.69250	1.0000
Si	Si45	1.0	0.80195	0.95274	0.69604	1.0000
Si	Si46	1.0	0.54323	0.95194	0.69405	1.0000

Si	Si47	1.0	0.86777	0.52412	0.62723	1.0000
Si	Si48	1.0	0.21328	0.66672	0.18960	1.0000
Si	Si49	1.0	0.46744	0.66415	0.19481	1.0000
Si	Si50	1.0	0.20698	0.28875	0.19158	1.0000
Si	Si51	1.0	0.46365	0.28347	0.19210	1.0000
Si	Si52	1.0	0.20421	0.04367	0.19312	1.0000
Si	Si53	1.0	0.46120	0.04052	0.19988	1.0000
Si	Si54	1.0	0.14929	0.46899	0.11929	1.0000
Si	Si55	1.0	0.13842	0.85904	0.12208	1.0000
Si	Si56	1.0	0.52649	0.46831	0.12648	1.0000
Si	Si57	1.0	0.84178	0.13875	0.62487	1.0000
Si	Si58	1.0	0.46758	0.52480	0.62646	1.0000
Si	Si59	1.0	0.52555	0.52568	0.37504	1.0000
Si	Si60	1.0	0.86841	0.85535	0.87537	1.0000
Si	Si61	1.0	0.47479	0.46743	0.87623	1.0000
Si	Si62	1.0	0.19540	0.94433	0.29871	1.0000

AlSiAl-T7T9:

data_image0

_chemical_formula_structural H2O128Al2Si62

_chemical_formula_sum "H2 O128 Al2 Si62"

_cell_length_a 12.5357

_cell_length_b 12.5453

_cell_length_c 26.484

_cell_angle_alpha 90.1445

_cell_angle_beta 90.2488

_cell_angle_gamma 90.2321

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47948	0.16124	0.53386	1.0000
H	H2	1.0	0.93248	0.97184	0.64033	1.0000
O	O1	1.0	0.32599	0.65896	0.06896	1.0000
O	O2	1.0	0.34973	0.80891	0.99851	1.0000
O	O3	1.0	0.22095	0.84055	0.07599	1.0000
O	O4	1.0	0.43069	0.83988	0.08854	1.0000
O	O5	1.0	0.34387	0.51839	0.99324	1.0000
O	O6	1.0	0.23317	0.46932	0.07502	1.0000

O	O7	1.0	0.44639	0.48605	0.07728	1.0000
O	O8	1.0	0.70655	0.67587	0.07003	1.0000
O	O9	1.0	0.82943	0.84558	0.05630	1.0000
O	O10	1.0	0.64021	0.86785	0.09601	1.0000
O	O11	1.0	0.83616	0.50821	0.06541	1.0000
O	O12	1.0	0.64778	0.49292	0.10871	1.0000
O	O13	1.0	0.96202	0.67804	0.05727	1.0000
O	O14	1.0	0.01687	0.86189	0.09899	1.0000
O	O15	1.0	0.03133	0.50280	0.10221	1.0000
O	O16	1.0	0.67691	0.32130	0.55836	1.0000
O	O17	1.0	0.67278	0.16739	0.48818	1.0000
O	O18	1.0	0.73596	0.12513	0.58338	1.0000
O	O19	1.0	0.53360	0.16084	0.56156	1.0000
O	O20	1.0	0.66369	0.49386	0.50102	1.0000
O	O21	1.0	0.76911	0.50127	0.58744	1.0000
O	O22	1.0	0.55694	0.48693	0.58507	1.0000
O	O23	1.0	0.28526	0.33496	0.56625	1.0000
O	O24	1.0	0.15581	0.16726	0.55376	1.0000
O	O25	1.0	0.33702	0.14895	0.60653	1.0000
O	O26	1.0	0.16622	0.50715	0.55731	1.0000
O	O27	1.0	0.35278	0.52192	0.60079	1.0000
O	O28	1.0	0.03222	0.33877	0.55349	1.0000
O	O29	1.0	0.96386	0.15812	0.59533	1.0000
O	O30	1.0	0.97957	0.52022	0.59797	1.0000
O	O31	1.0	0.33559	0.37304	0.31081	1.0000
O	O32	1.0	0.17299	0.33243	0.24795	1.0000
O	O33	1.0	0.19180	0.22491	0.33376	1.0000
O	O34	1.0	0.14001	0.43087	0.33420	1.0000
O	O35	1.0	0.49375	0.34089	0.24518	1.0000
O	O36	1.0	0.48579	0.22998	0.32948	1.0000
O	O37	1.0	0.53262	0.43908	0.33020	1.0000
O	O38	1.0	0.32939	0.71222	0.31082	1.0000
O	O39	1.0	0.15575	0.83238	0.30765	1.0000
O	O40	1.0	0.14759	0.64218	0.34695	1.0000

O	O41	1.0	0.49929	0.83714	0.31374	1.0000
O	O42	1.0	0.50564	0.64538	0.35332	1.0000
O	O43	1.0	0.32604	0.96024	0.30705	1.0000
O	O44	1.0	0.14471	0.02216	0.34876	1.0000
O	O45	1.0	0.49872	0.02676	0.35501	1.0000
O	O46	1.0	0.66254	0.69038	0.81406	1.0000
O	O47	1.0	0.82373	0.64431	0.75189	1.0000
O	O48	1.0	0.85560	0.76419	0.83209	1.0000
O	O49	1.0	0.81579	0.55466	0.84061	1.0000
O	O50	1.0	0.51101	0.64958	0.74596	1.0000
O	O51	1.0	0.46503	0.75298	0.83079	1.0000
O	O52	1.0	0.50891	0.54653	0.83192	1.0000
O	O53	1.0	0.67122	0.29423	0.81930	1.0000
O	O54	1.0	0.83768	0.16385	0.81326	1.0000
O	O55	1.0	0.85948	0.35073	0.85609	1.0000
O	O56	1.0	0.50756	0.15886	0.81407	1.0000
O	O57	1.0	0.48193	0.34486	0.85431	1.0000
O	O58	1.0	0.67319	0.02648	0.80786	1.0000
O	O59	1.0	0.85383	0.97252	0.85192	1.0000
O	O60	1.0	0.48608	0.96240	0.84133	1.0000
O	O61	1.0	0.67417	0.65534	0.93454	1.0000
O	O62	1.0	0.65515	0.81708	0.99949	1.0000
O	O63	1.0	0.78188	0.83402	0.92046	1.0000
O	O64	1.0	0.57104	0.83278	0.90946	1.0000
O	O65	1.0	0.65780	0.51365	0.00956	1.0000
O	O66	1.0	0.76746	0.46663	0.92812	1.0000
O	O67	1.0	0.55482	0.48076	0.92463	1.0000
O	O68	1.0	0.29244	0.66974	0.92748	1.0000
O	O69	1.0	0.17389	0.84152	0.94375	1.0000
O	O70	1.0	0.36193	0.86085	0.90205	1.0000
O	O71	1.0	0.16553	0.50076	0.93919	1.0000
O	O72	1.0	0.35302	0.48219	0.89482	1.0000
O	O73	1.0	0.04310	0.67286	0.94588	1.0000
O	O74	1.0	0.98768	0.85062	0.89908	1.0000

O	O75	1.0	0.97098	0.49591	0.90338	1.0000
O	O76	1.0	0.30842	0.32803	0.43805	1.0000
O	O77	1.0	0.34573	0.17640	0.50794	1.0000
O	O78	1.0	0.23947	0.13309	0.42178	1.0000
O	O79	1.0	0.45012	0.17204	0.42459	1.0000
O	O80	1.0	0.34101	0.48851	0.50210	1.0000
O	O81	1.0	0.22507	0.51531	0.41831	1.0000
O	O82	1.0	0.43535	0.49160	0.41467	1.0000
O	O83	1.0	0.69448	0.34106	0.43294	1.0000
O	O84	1.0	0.83698	0.18326	0.42454	1.0000
O	O85	1.0	0.64463	0.15901	0.38867	1.0000
O	O86	1.0	0.83015	0.50432	0.43913	1.0000
O	O87	1.0	0.64055	0.53500	0.40394	1.0000
O	O88	1.0	0.97188	0.34487	0.43870	1.0000
O	O89	1.0	0.03611	0.16593	0.39741	1.0000
O	O90	1.0	0.01720	0.53199	0.39959	1.0000
O	O91	1.0	0.67068	0.37529	0.69233	1.0000
O	O92	1.0	0.83041	0.34046	0.75715	1.0000
O	O93	1.0	0.81153	0.21715	0.67609	1.0000
O	O94	1.0	0.86860	0.42209	0.66834	1.0000
O	O95	1.0	0.51129	0.32881	0.75471	1.0000
O	O96	1.0	0.52251	0.23492	0.66361	1.0000
O	O97	1.0	0.47354	0.44089	0.67445	1.0000
O	O98	1.0	0.67345	0.70092	0.68612	1.0000
O	O99	1.0	0.84737	0.82043	0.69655	1.0000
O	O100	1.0	0.85954	0.63343	0.65368	1.0000
O	O101	1.0	0.50790	0.82906	0.69284	1.0000
O	O102	1.0	0.49013	0.64359	0.64619	1.0000
O	O103	1.0	0.68007	0.95506	0.69056	1.0000
O	O104	1.0	0.50224	0.01142	0.64334	1.0000
O	O105	1.0	0.33973	0.70036	0.18874	1.0000
O	O106	1.0	0.17252	0.66043	0.24839	1.0000
O	O107	1.0	0.14633	0.76275	0.16255	1.0000
O	O108	1.0	0.19280	0.55525	0.16409	1.0000

O	O109	1.0	0.49739	0.66481	0.25408	1.0000
O	O110	1.0	0.53652	0.75962	0.16672	1.0000
O	O111	1.0	0.48893	0.55283	0.17043	1.0000
O	O112	1.0	0.33141	0.29727	0.18370	1.0000
O	O113	1.0	0.16549	0.16483	0.18633	1.0000
O	O114	1.0	0.14202	0.35508	0.14864	1.0000
O	O115	1.0	0.49861	0.16549	0.18899	1.0000
O	O116	1.0	0.51899	0.35102	0.14625	1.0000
O	O117	1.0	0.33259	0.03382	0.19491	1.0000
O	O118	1.0	0.15664	0.97281	0.14887	1.0000
O	O119	1.0	0.51616	0.97010	0.15660	1.0000
O	O120	1.0	0.99999	0.84618	0.99916	1.0000
O	O121	1.0	0.00165	0.50471	0.00284	1.0000
O	O122	1.0	0.98533	0.17189	0.49568	1.0000
O	O123	1.0	0.99721	0.51255	0.49887	1.0000
O	O124	1.0	0.15814	0.00165	0.24884	1.0000
O	O125	1.0	0.50014	0.00729	0.25492	1.0000
O	O126	1.0	0.84555	0.99644	0.75246	1.0000
O	O127	1.0	0.51046	0.00852	0.74409	1.0000
O	O128	1.0	0.86716	0.00505	0.65245	1.0000
Al	Al1	1.0	0.46873	0.13811	0.62530	1.0000
Al	Al2	1.0	0.84273	0.14093	0.62443	1.0000
Si	Si1	1.0	0.33227	0.78675	0.05815	1.0000
Si	Si2	1.0	0.33708	0.53324	0.05378	1.0000
Si	Si3	1.0	0.70816	0.80110	0.05510	1.0000
Si	Si4	1.0	0.71302	0.54769	0.06291	1.0000
Si	Si5	1.0	0.95206	0.80674	0.05278	1.0000
Si	Si6	1.0	0.95788	0.54877	0.05675	1.0000
Si	Si7	1.0	0.52976	0.85847	0.12707	1.0000
Si	Si8	1.0	0.66159	0.19459	0.54778	1.0000
Si	Si9	1.0	0.66657	0.45093	0.55876	1.0000
Si	Si10	1.0	0.27825	0.20614	0.56065	1.0000
Si	Si11	1.0	0.28673	0.46216	0.55659	1.0000
Si	Si12	1.0	0.03295	0.20897	0.55073	1.0000

Si	Si13	1.0	0.04398	0.46730	0.55184	1.0000
Si	Si14	1.0	0.20991	0.33970	0.30669	1.0000
Si	Si15	1.0	0.46188	0.34540	0.30421	1.0000
Si	Si16	1.0	0.20155	0.71210	0.30315	1.0000
Si	Si17	1.0	0.45790	0.71510	0.30754	1.0000
Si	Si18	1.0	0.19696	0.95449	0.30299	1.0000
Si	Si19	1.0	0.45525	0.95775	0.30737	1.0000
Si	Si20	1.0	0.13441	0.52867	0.37457	1.0000
Si	Si21	1.0	0.78922	0.66250	0.81036	1.0000
Si	Si22	1.0	0.53677	0.65931	0.80584	1.0000
Si	Si23	1.0	0.79905	0.28728	0.81074	1.0000
Si	Si24	1.0	0.54365	0.28241	0.80955	1.0000
Si	Si25	1.0	0.80137	0.04115	0.80670	1.0000
Si	Si26	1.0	0.54477	0.03898	0.80134	1.0000
Si	Si27	1.0	0.85325	0.46742	0.88212	1.0000
Si	Si28	1.0	0.67010	0.78445	0.94066	1.0000
Si	Si29	1.0	0.66320	0.52941	0.94892	1.0000
Si	Si30	1.0	0.29411	0.79487	0.94323	1.0000
Si	Si31	1.0	0.28814	0.54278	0.93898	1.0000
Si	Si32	1.0	0.05109	0.80190	0.94706	1.0000
Si	Si33	1.0	0.04513	0.54382	0.94804	1.0000
Si	Si34	1.0	0.47225	0.85145	0.87081	1.0000
Si	Si35	1.0	0.33455	0.20283	0.44759	1.0000
Si	Si36	1.0	0.32753	0.45651	0.44310	1.0000
Si	Si37	1.0	0.71338	0.21336	0.43390	1.0000
Si	Si38	1.0	0.70759	0.46754	0.44485	1.0000
Si	Si39	1.0	0.95830	0.21644	0.43966	1.0000
Si	Si40	1.0	0.95399	0.47225	0.44441	1.0000
Si	Si41	1.0	0.51943	0.14771	0.37393	1.0000
Si	Si42	1.0	0.79435	0.33548	0.69787	1.0000
Si	Si43	1.0	0.54440	0.34123	0.69551	1.0000
Si	Si44	1.0	0.79980	0.69843	0.69743	1.0000
Si	Si45	1.0	0.54494	0.70602	0.69306	1.0000
Si	Si46	1.0	0.54828	0.95234	0.69163	1.0000

Si	Si47	1.0	0.86711	0.51702	0.62717	1.0000
Si	Si48	1.0	0.21311	0.66958	0.19045	1.0000
Si	Si49	1.0	0.46553	0.66884	0.19462	1.0000
Si	Si50	1.0	0.20345	0.28777	0.19202	1.0000
Si	Si51	1.0	0.45962	0.28815	0.19134	1.0000
Si	Si52	1.0	0.20370	0.04315	0.19496	1.0000
Si	Si53	1.0	0.46122	0.04388	0.19895	1.0000
Si	Si54	1.0	0.14944	0.47119	0.12203	1.0000
Si	Si55	1.0	0.13678	0.85903	0.12185	1.0000
Si	Si56	1.0	0.52534	0.47216	0.12556	1.0000
Si	Si57	1.0	0.46962	0.52213	0.62710	1.0000
Si	Si58	1.0	0.15275	0.13818	0.37551	1.0000
Si	Si59	1.0	0.52698	0.52747	0.37523	1.0000
Si	Si60	1.0	0.86820	0.85482	0.87583	1.0000
Si	Si61	1.0	0.47508	0.46465	0.87653	1.0000
Si	Si62	1.0	0.80452	0.94115	0.70101	1.0000

T1T7T7:

data_image0
_chemical_formula_structural H3O128Al3Si61
_chemical_formula_sum "H3 O128 Al3 Si61"
_cell_length_a 12.5705
_cell_length_b 12.5379
_cell_length_c 26.4793
_cell_angle_alpha 90.0149
_cell_angle_beta 90.0909
_cell_angle_gamma 90.5565

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.48149	0.14561	0.53397	1.0000
H	H2	1.0	0.85129	0.51398	0.71680	1.0000
H	H3	1.0	0.10393	0.81953	0.34567	1.0000
O	O1	1.0	0.32749	0.65578	0.06728	1.0000
O	O2	1.0	0.34626	0.80971	0.99802	1.0000
O	O3	1.0	0.22158	0.83520	0.07699	1.0000
O	O4	1.0	0.43225	0.83703	0.08669	1.0000
O	O5	1.0	0.33603	0.50840	0.99393	1.0000

O	O6	1.0	0.23393	0.46724	0.07909	1.0000
O	O7	1.0	0.44570	0.48176	0.07581	1.0000
O	O8	1.0	0.69647	0.67165	0.06257	1.0000
O	O9	1.0	0.83130	0.83522	0.05837	1.0000
O	O10	1.0	0.64112	0.86366	0.09467	1.0000
O	O11	1.0	0.83558	0.51050	0.06530	1.0000
O	O12	1.0	0.64697	0.48747	0.10412	1.0000
O	O13	1.0	0.97078	0.67379	0.05813	1.0000
O	O14	1.0	0.01856	0.85996	0.09878	1.0000
O	O15	1.0	0.02951	0.49259	0.10024	1.0000
O	O16	1.0	0.63441	0.32978	0.55499	1.0000
O	O17	1.0	0.68149	0.17132	0.49141	1.0000
O	O18	1.0	0.73895	0.15631	0.58838	1.0000
O	O19	1.0	0.53595	0.14286	0.56136	1.0000
O	O20	1.0	0.67087	0.50680	0.50276	1.0000
O	O21	1.0	0.77198	0.47144	0.59028	1.0000
O	O22	1.0	0.56367	0.51612	0.58623	1.0000
O	O23	1.0	0.28151	0.32845	0.56967	1.0000
O	O24	1.0	0.15292	0.15996	0.55477	1.0000
O	O25	1.0	0.33360	0.14050	0.60662	1.0000
O	O26	1.0	0.17310	0.50370	0.55297	1.0000
O	O27	1.0	0.35506	0.51500	0.60282	1.0000
O	O28	1.0	0.03903	0.33569	0.55105	1.0000
O	O29	1.0	0.95336	0.15852	0.58986	1.0000
O	O30	1.0	0.99587	0.50612	0.60581	1.0000
O	O31	1.0	0.33495	0.37759	0.31211	1.0000
O	O32	1.0	0.17136	0.33225	0.25126	1.0000
O	O33	1.0	0.20298	0.21592	0.33386	1.0000
O	O34	1.0	0.13815	0.41707	0.34100	1.0000
O	O35	1.0	0.49449	0.33819	0.24824	1.0000
O	O36	1.0	0.47722	0.22945	0.33384	1.0000
O	O37	1.0	0.53308	0.43633	0.33345	1.0000
O	O38	1.0	0.33872	0.71958	0.30975	1.0000
O	O39	1.0	0.16913	0.62562	0.34994	1.0000

O	O40	1.0	0.51420	0.83633	0.30953	1.0000
O	O41	1.0	0.51405	0.64615	0.35099	1.0000
O	O42	1.0	0.34109	0.95960	0.31084	1.0000
O	O43	1.0	0.14011	0.01962	0.35543	1.0000
O	O44	1.0	0.52588	0.02644	0.34893	1.0000
O	O45	1.0	0.67492	0.67868	0.81726	1.0000
O	O46	1.0	0.81938	0.65440	0.74197	1.0000
O	O47	1.0	0.86803	0.75983	0.82614	1.0000
O	O48	1.0	0.84056	0.54724	0.82449	1.0000
O	O49	1.0	0.52717	0.64513	0.74779	1.0000
O	O50	1.0	0.48126	0.75634	0.83068	1.0000
O	O51	1.0	0.50918	0.54837	0.83458	1.0000
O	O52	1.0	0.66206	0.32070	0.81477	1.0000
O	O53	1.0	0.79730	0.15751	0.82614	1.0000
O	O54	1.0	0.84971	0.34956	0.85696	1.0000
O	O55	1.0	0.52413	0.15938	0.81895	1.0000
O	O56	1.0	0.46708	0.34537	0.84967	1.0000
O	O57	1.0	0.65876	0.99789	0.80878	1.0000
O	O58	1.0	0.84315	0.96299	0.85207	1.0000
O	O59	1.0	0.46396	0.96618	0.84043	1.0000
O	O60	1.0	0.63080	0.65958	0.93751	1.0000
O	O61	1.0	0.66325	0.82813	0.99693	1.0000
O	O62	1.0	0.77921	0.80504	0.91456	1.0000
O	O63	1.0	0.57300	0.85372	0.90857	1.0000
O	O64	1.0	0.66779	0.50285	0.00412	1.0000
O	O65	1.0	0.76100	0.50091	0.91507	1.0000
O	O66	1.0	0.55214	0.46466	0.92375	1.0000
O	O67	1.0	0.28439	0.66436	0.93100	1.0000
O	O68	1.0	0.17101	0.83954	0.94235	1.0000
O	O69	1.0	0.36042	0.84848	0.90089	1.0000
O	O70	1.0	0.15996	0.49435	0.93811	1.0000
O	O71	1.0	0.34923	0.48189	0.89507	1.0000
O	O72	1.0	0.04093	0.66988	0.94396	1.0000
O	O73	1.0	0.98337	0.84884	0.89893	1.0000

O	O74	1.0	0.96850	0.49385	0.90071	1.0000
O	O75	1.0	0.33982	0.32157	0.43510	1.0000
O	O76	1.0	0.34606	0.17422	0.50916	1.0000
O	O77	1.0	0.22833	0.14195	0.42727	1.0000
O	O78	1.0	0.44281	0.14028	0.42396	1.0000
O	O79	1.0	0.35497	0.47359	0.50505	1.0000
O	O80	1.0	0.22834	0.49741	0.42499	1.0000
O	O81	1.0	0.43746	0.50615	0.41618	1.0000
O	O82	1.0	0.70456	0.34894	0.43864	1.0000
O	O83	1.0	0.83679	0.18636	0.42362	1.0000
O	O84	1.0	0.64016	0.17335	0.39269	1.0000
O	O85	1.0	0.83453	0.51858	0.43908	1.0000
O	O86	1.0	0.64452	0.53715	0.40430	1.0000
O	O87	1.0	0.96509	0.35162	0.44185	1.0000
O	O88	1.0	0.03462	0.18256	0.39349	1.0000
O	O89	1.0	0.02704	0.53697	0.40536	1.0000
O	O90	1.0	0.67129	0.35642	0.69664	1.0000
O	O91	1.0	0.83429	0.30906	0.75802	1.0000
O	O92	1.0	0.84509	0.25822	0.66056	1.0000
O	O93	1.0	0.49871	0.31481	0.75109	1.0000
O	O94	1.0	0.52168	0.23115	0.65872	1.0000
O	O95	1.0	0.48626	0.44053	0.67283	1.0000
O	O96	1.0	0.66812	0.71896	0.68034	1.0000
O	O97	1.0	0.83961	0.84537	0.69454	1.0000
O	O98	1.0	0.85489	0.66207	0.64445	1.0000
O	O99	1.0	0.49952	0.83148	0.70270	1.0000
O	O100	1.0	0.47737	0.64855	0.65185	1.0000
O	O101	1.0	0.66831	0.96446	0.69474	1.0000
O	O102	1.0	0.84640	0.04354	0.65551	1.0000
O	O103	1.0	0.49199	0.00254	0.64427	1.0000
O	O104	1.0	0.33878	0.69541	0.18748	1.0000
O	O105	1.0	0.17633	0.66417	0.25041	1.0000
O	O106	1.0	0.14760	0.77093	0.16609	1.0000
O	O107	1.0	0.17911	0.56083	0.16489	1.0000

O	O108	1.0	0.49815	0.66003	0.25201	1.0000
O	O109	1.0	0.53247	0.76938	0.16838	1.0000
O	O110	1.0	0.49453	0.55975	0.16593	1.0000
O	O111	1.0	0.33071	0.30332	0.18708	1.0000
O	O112	1.0	0.16935	0.16399	0.18964	1.0000
O	O113	1.0	0.14016	0.35571	0.15285	1.0000
O	O114	1.0	0.49554	0.16827	0.18849	1.0000
O	O115	1.0	0.51810	0.35481	0.14873	1.0000
O	O116	1.0	0.33384	0.03109	0.19239	1.0000
O	O117	1.0	0.15819	0.97908	0.14478	1.0000
O	O118	1.0	0.51684	0.97796	0.15055	1.0000
O	O119	1.0	0.99824	0.84186	0.99872	1.0000
O	O120	1.0	0.99586	0.50178	0.00076	1.0000
O	O121	1.0	0.98921	0.17092	0.49221	1.0000
O	O122	1.0	0.99171	0.51535	0.50475	1.0000
O	O123	1.0	0.15994	0.98724	0.24566	1.0000
O	O124	1.0	0.50565	0.00326	0.24986	1.0000
O	O125	1.0	0.83352	0.01584	0.75374	1.0000
O	O126	1.0	0.49691	0.02188	0.74441	1.0000
O	O127	1.0	0.85518	0.46014	0.68931	1.0000
O	O128	1.0	0.15742	0.82036	0.31898	1.0000
Al	Al1	1.0	0.46448	0.12894	0.62455	1.0000
Al	Al2	1.0	0.86990	0.53169	0.62604	1.0000
Al	Al3	1.0	0.20546	0.96113	0.30549	1.0000
Si	Si1	1.0	0.33224	0.78423	0.05762	1.0000
Si	Si2	1.0	0.33535	0.52895	0.05423	1.0000
Si	Si3	1.0	0.70812	0.79909	0.05285	1.0000
Si	Si4	1.0	0.71219	0.54364	0.05858	1.0000
Si	Si5	1.0	0.95458	0.80187	0.05327	1.0000
Si	Si6	1.0	0.95831	0.54501	0.05586	1.0000
Si	Si7	1.0	0.52974	0.86189	0.12517	1.0000
Si	Si8	1.0	0.65405	0.20416	0.54895	1.0000
Si	Si9	1.0	0.66318	0.45783	0.55967	1.0000
Si	Si10	1.0	0.27574	0.20020	0.56144	1.0000

Si	Si11	1.0	0.29094	0.45500	0.55803	1.0000
Si	Si12	1.0	0.03385	0.20743	0.54747	1.0000
Si	Si13	1.0	0.04911	0.46539	0.55492	1.0000
Si	Si14	1.0	0.21179	0.33439	0.30947	1.0000
Si	Si15	1.0	0.46015	0.34450	0.30707	1.0000
Si	Si16	1.0	0.46810	0.71639	0.30531	1.0000
Si	Si17	1.0	0.46757	0.95730	0.30458	1.0000
Si	Si18	1.0	0.14201	0.51615	0.38044	1.0000
Si	Si19	1.0	0.79946	0.66107	0.80294	1.0000
Si	Si20	1.0	0.54771	0.65750	0.80778	1.0000
Si	Si21	1.0	0.78524	0.28297	0.81407	1.0000
Si	Si22	1.0	0.53754	0.28496	0.80764	1.0000
Si	Si23	1.0	0.78334	0.03355	0.80974	1.0000
Si	Si24	1.0	0.53583	0.03654	0.80235	1.0000
Si	Si25	1.0	0.85378	0.47351	0.87495	1.0000
Si	Si26	1.0	0.66175	0.78635	0.93892	1.0000
Si	Si27	1.0	0.65328	0.53250	0.94498	1.0000
Si	Si28	1.0	0.28989	0.79049	0.94346	1.0000
Si	Si29	1.0	0.28221	0.53691	0.93988	1.0000
Si	Si30	1.0	0.04835	0.79918	0.94611	1.0000
Si	Si31	1.0	0.04106	0.54069	0.94618	1.0000
Si	Si32	1.0	0.47116	0.85455	0.87042	1.0000
Si	Si33	1.0	0.33776	0.19474	0.44811	1.0000
Si	Si34	1.0	0.34017	0.44952	0.44547	1.0000
Si	Si35	1.0	0.71610	0.22074	0.43646	1.0000
Si	Si36	1.0	0.71352	0.47715	0.44691	1.0000
Si	Si37	1.0	0.95747	0.22291	0.43802	1.0000
Si	Si38	1.0	0.95492	0.47959	0.44867	1.0000
Si	Si39	1.0	0.52066	0.14289	0.37450	1.0000
Si	Si40	1.0	0.54211	0.33301	0.69369	1.0000
Si	Si41	1.0	0.79605	0.72298	0.68892	1.0000
Si	Si42	1.0	0.54316	0.71167	0.69538	1.0000
Si	Si43	1.0	0.79608	0.96686	0.69925	1.0000
Si	Si44	1.0	0.53869	0.95485	0.69525	1.0000

Si	Si45	1.0	0.21134	0.67266	0.19089	1.0000
Si	Si46	1.0	0.46584	0.67102	0.19284	1.0000
Si	Si47	1.0	0.20330	0.28771	0.19537	1.0000
Si	Si48	1.0	0.45849	0.29053	0.19354	1.0000
Si	Si49	1.0	0.20463	0.03975	0.19461	1.0000
Si	Si50	1.0	0.46154	0.04448	0.19580	1.0000
Si	Si51	1.0	0.14574	0.46954	0.12404	1.0000
Si	Si52	1.0	0.13784	0.86151	0.12204	1.0000
Si	Si53	1.0	0.52589	0.47190	0.12368	1.0000
Si	Si54	1.0	0.84631	0.15361	0.62353	1.0000
Si	Si55	1.0	0.47156	0.52875	0.62849	1.0000
Si	Si56	1.0	0.15059	0.13821	0.37744	1.0000
Si	Si57	1.0	0.53124	0.53014	0.37591	1.0000
Si	Si58	1.0	0.86667	0.84441	0.87306	1.0000
Si	Si59	1.0	0.46974	0.46163	0.87609	1.0000
Si	Si60	1.0	0.79718	0.33976	0.70139	1.0000
Si	Si61	1.0	0.21367	0.70042	0.30597	1.0000

T2T7T7:

```
data_image0
  _chemical_formula_structural      H3O128Al3Si61
  _chemical_formula_sum           "H3 O128 Al3 Si61"
  _cell_length_a          12.5517
  _cell_length_b          12.5326
  _cell_length_c          26.4399
  _cell_angle_alpha       90.0138
  _cell_angle_beta        90.1029
  _cell_angle_gamma       90.4138
```

```
  _space_group_name_H-M_alt    "P 1"
  _space_group_IT_number       1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy
    H   H1        1.0  0.48456  0.14597  0.53213  1.0000
    H   H2        1.0  0.85195  0.51654  0.71708  1.0000
    H   H3        1.0  0.56320  0.83230  0.34753  1.0000
    O   O1        1.0  0.29862  0.65762  0.06227  1.0000
    O   O2        1.0  0.34495  0.81695  0.99844  1.0000
    O   O3        1.0  0.23279  0.85399  0.08065  1.0000
    O   O4        1.0  0.44051  0.80752  0.08590  1.0000
    O   O5        1.0  0.33969  0.50399  0.99485  1.0000
```

O	O6	1.0	0.23371	0.45994	0.07879	1.0000
O	O7	1.0	0.44205	0.50508	0.08071	1.0000
O	O8	1.0	0.69887	0.67150	0.06382	1.0000
O	O9	1.0	0.83239	0.83689	0.05936	1.0000
O	O10	1.0	0.64214	0.86235	0.09685	1.0000
O	O11	1.0	0.83392	0.50728	0.06494	1.0000
O	O12	1.0	0.64485	0.48668	0.10423	1.0000
O	O13	1.0	0.96728	0.67206	0.05687	1.0000
O	O14	1.0	0.02344	0.85501	0.09800	1.0000
O	O15	1.0	0.02844	0.49172	0.09922	1.0000
O	O16	1.0	0.63782	0.33133	0.55260	1.0000
O	O17	1.0	0.68854	0.17037	0.49087	1.0000
O	O18	1.0	0.73898	0.15805	0.58902	1.0000
O	O19	1.0	0.53841	0.14486	0.55972	1.0000
O	O20	1.0	0.67911	0.50812	0.50066	1.0000
O	O21	1.0	0.77278	0.47261	0.59041	1.0000
O	O22	1.0	0.56400	0.51741	0.58237	1.0000
O	O23	1.0	0.28400	0.32886	0.56799	1.0000
O	O24	1.0	0.15358	0.15877	0.55814	1.0000
O	O25	1.0	0.33716	0.14296	0.60697	1.0000
O	O26	1.0	0.17214	0.50232	0.55167	1.0000
O	O27	1.0	0.35550	0.51664	0.60103	1.0000
O	O28	1.0	0.03899	0.33376	0.55386	1.0000
O	O29	1.0	0.95296	0.15578	0.59111	1.0000
O	O30	1.0	0.99872	0.50528	0.60860	1.0000
O	O31	1.0	0.34209	0.37676	0.31145	1.0000
O	O32	1.0	0.17396	0.34120	0.25198	1.0000
O	O33	1.0	0.20576	0.21869	0.33233	1.0000
O	O34	1.0	0.14706	0.42177	0.34316	1.0000
O	O35	1.0	0.49551	0.33159	0.24431	1.0000
O	O36	1.0	0.48611	0.22866	0.33172	1.0000
O	O37	1.0	0.54220	0.43543	0.32738	1.0000
O	O38	1.0	0.32938	0.72181	0.31081	1.0000
O	O39	1.0	0.14835	0.82887	0.31044	1.0000

O	O40	1.0	0.15484	0.63481	0.34719	1.0000
O	O41	1.0	0.49526	0.63260	0.35720	1.0000
O	O42	1.0	0.31806	0.95868	0.31008	1.0000
O	O43	1.0	0.13387	0.02180	0.34863	1.0000
O	O44	1.0	0.51425	0.02721	0.35720	1.0000
O	O45	1.0	0.67450	0.67837	0.81534	1.0000
O	O46	1.0	0.82199	0.65352	0.74153	1.0000
O	O47	1.0	0.86594	0.76144	0.82578	1.0000
O	O48	1.0	0.84105	0.54822	0.82481	1.0000
O	O49	1.0	0.52381	0.64556	0.74671	1.0000
O	O50	1.0	0.48289	0.75874	0.82992	1.0000
O	O51	1.0	0.50865	0.55002	0.83390	1.0000
O	O52	1.0	0.65984	0.31921	0.81347	1.0000
O	O53	1.0	0.79780	0.15860	0.82663	1.0000
O	O54	1.0	0.84516	0.35077	0.85816	1.0000
O	O55	1.0	0.51760	0.16097	0.81716	1.0000
O	O56	1.0	0.46527	0.34743	0.84829	1.0000
O	O57	1.0	0.65648	0.00204	0.80869	1.0000
O	O58	1.0	0.83931	0.96359	0.85353	1.0000
O	O59	1.0	0.46258	0.96777	0.84080	1.0000
O	O60	1.0	0.62780	0.66055	0.93768	1.0000
O	O61	1.0	0.66346	0.82768	0.99808	1.0000
O	O62	1.0	0.77844	0.80370	0.91524	1.0000
O	O63	1.0	0.57246	0.85545	0.90924	1.0000
O	O64	1.0	0.66452	0.50427	0.00441	1.0000
O	O65	1.0	0.76457	0.50628	0.91667	1.0000
O	O66	1.0	0.55561	0.46363	0.92215	1.0000
O	O67	1.0	0.28650	0.66442	0.93444	1.0000
O	O68	1.0	0.17031	0.83914	0.94142	1.0000
O	O69	1.0	0.36006	0.84666	0.90037	1.0000
O	O70	1.0	0.16192	0.49423	0.93922	1.0000
O	O71	1.0	0.35099	0.48414	0.89562	1.0000
O	O72	1.0	0.04069	0.66904	0.94330	1.0000
O	O73	1.0	0.98232	0.84827	0.89847	1.0000

O	O74	1.0	0.97136	0.49213	0.89968	1.0000
O	O75	1.0	0.30421	0.32152	0.43842	1.0000
O	O76	1.0	0.34094	0.16986	0.50845	1.0000
O	O77	1.0	0.24303	0.12428	0.42061	1.0000
O	O78	1.0	0.45329	0.17044	0.42724	1.0000
O	O79	1.0	0.35508	0.47625	0.50343	1.0000
O	O80	1.0	0.25333	0.52113	0.41715	1.0000
O	O81	1.0	0.45617	0.46427	0.41766	1.0000
O	O82	1.0	0.71166	0.34783	0.43768	1.0000
O	O83	1.0	0.84435	0.18439	0.42308	1.0000
O	O84	1.0	0.64826	0.17197	0.39151	1.0000
O	O85	1.0	0.84172	0.51712	0.43541	1.0000
O	O86	1.0	0.65074	0.53490	0.40121	1.0000
O	O87	1.0	0.97079	0.34971	0.44316	1.0000
O	O88	1.0	0.04488	0.18105	0.39585	1.0000
O	O89	1.0	0.04213	0.53560	0.41197	1.0000
O	O90	1.0	0.67286	0.35891	0.69725	1.0000
O	O91	1.0	0.83564	0.31121	0.75891	1.0000
O	O92	1.0	0.84625	0.25930	0.66129	1.0000
O	O93	1.0	0.49714	0.31764	0.74930	1.0000
O	O94	1.0	0.52742	0.23144	0.65770	1.0000
O	O95	1.0	0.48901	0.44075	0.66967	1.0000
O	O96	1.0	0.66854	0.71947	0.68115	1.0000
O	O97	1.0	0.84079	0.84532	0.69489	1.0000
O	O98	1.0	0.85461	0.66340	0.64360	1.0000
O	O99	1.0	0.49717	0.83123	0.70066	1.0000
O	O100	1.0	0.48002	0.64874	0.64964	1.0000
O	O101	1.0	0.66781	0.96200	0.69665	1.0000
O	O102	1.0	0.84401	0.04426	0.65683	1.0000
O	O103	1.0	0.49636	0.00364	0.64301	1.0000
O	O104	1.0	0.34294	0.68821	0.18808	1.0000
O	O105	1.0	0.17595	0.65988	0.24911	1.0000
O	O106	1.0	0.15621	0.77372	0.16616	1.0000
O	O107	1.0	0.17996	0.56252	0.16214	1.0000

O	O108	1.0	0.49764	0.66378	0.25686	1.0000
O	O109	1.0	0.53705	0.76634	0.17198	1.0000
O	O110	1.0	0.50538	0.55460	0.17339	1.0000
O	O111	1.0	0.32696	0.29759	0.18603	1.0000
O	O112	1.0	0.15880	0.16795	0.19377	1.0000
O	O113	1.0	0.13618	0.35688	0.15376	1.0000
O	O114	1.0	0.49158	0.16197	0.18372	1.0000
O	O115	1.0	0.50951	0.35310	0.14467	1.0000
O	O116	1.0	0.32450	0.03475	0.19401	1.0000
O	O117	1.0	0.14474	0.98267	0.14888	1.0000
O	O118	1.0	0.49703	0.96903	0.14649	1.0000
O	O119	1.0	0.99803	0.84099	0.99833	1.0000
O	O120	1.0	0.99396	0.50029	0.99978	1.0000
O	O121	1.0	0.99320	0.16913	0.49373	1.0000
O	O122	1.0	0.98437	0.51168	0.50820	1.0000
O	O123	1.0	0.15130	0.99381	0.24922	1.0000
O	O124	1.0	0.49998	0.99424	0.24674	1.0000
O	O125	1.0	0.83363	0.01460	0.75499	1.0000
O	O126	1.0	0.49366	0.02016	0.74386	1.0000
O	O127	1.0	0.85638	0.46182	0.68983	1.0000
O	O128	1.0	0.50682	0.82764	0.32215	1.0000
Al	Al1	1.0	0.46863	0.13024	0.62353	1.0000
Al	Al2	1.0	0.87095	0.53233	0.62640	1.0000
Al	Al3	1.0	0.45357	0.96572	0.30637	1.0000
Si	Si1	1.0	0.32932	0.78429	0.05731	1.0000
Si	Si2	1.0	0.32898	0.53188	0.05451	1.0000
Si	Si3	1.0	0.70921	0.79915	0.05414	1.0000
Si	Si4	1.0	0.71080	0.54310	0.05892	1.0000
Si	Si5	1.0	0.95508	0.80058	0.05300	1.0000
Si	Si6	1.0	0.95622	0.54325	0.05497	1.0000
Si	Si7	1.0	0.52853	0.85265	0.12570	1.0000
Si	Si8	1.0	0.65733	0.20539	0.54779	1.0000
Si	Si9	1.0	0.66641	0.45936	0.55767	1.0000
Si	Si10	1.0	0.27649	0.20008	0.56178	1.0000

Si	Si11	1.0	0.29131	0.45563	0.55647	1.0000
Si	Si12	1.0	0.03462	0.20561	0.54962	1.0000
Si	Si13	1.0	0.04849	0.46349	0.55700	1.0000
Si	Si14	1.0	0.21690	0.33905	0.30991	1.0000
Si	Si15	1.0	0.46641	0.34157	0.30365	1.0000
Si	Si16	1.0	0.20035	0.71233	0.30411	1.0000
Si	Si17	1.0	0.19133	0.95184	0.30442	1.0000
Si	Si18	1.0	0.15021	0.52637	0.37973	1.0000
Si	Si19	1.0	0.79978	0.66135	0.80244	1.0000
Si	Si20	1.0	0.54690	0.65855	0.80661	1.0000
Si	Si21	1.0	0.78387	0.28385	0.81436	1.0000
Si	Si22	1.0	0.53466	0.28618	0.80602	1.0000
Si	Si23	1.0	0.78178	0.03469	0.81055	1.0000
Si	Si24	1.0	0.53259	0.03781	0.80174	1.0000
Si	Si25	1.0	0.85440	0.47482	0.87544	1.0000
Si	Si26	1.0	0.66060	0.78686	0.93977	1.0000
Si	Si27	1.0	0.65348	0.53392	0.94502	1.0000
Si	Si28	1.0	0.29000	0.79166	0.94396	1.0000
Si	Si29	1.0	0.28439	0.53650	0.94135	1.0000
Si	Si30	1.0	0.04785	0.79836	0.94552	1.0000
Si	Si31	1.0	0.04201	0.53981	0.94578	1.0000
Si	Si32	1.0	0.47135	0.85564	0.87037	1.0000
Si	Si33	1.0	0.33455	0.19641	0.44788	1.0000
Si	Si34	1.0	0.34131	0.44628	0.44428	1.0000
Si	Si35	1.0	0.72332	0.21943	0.43568	1.0000
Si	Si36	1.0	0.72085	0.47625	0.44473	1.0000
Si	Si37	1.0	0.96422	0.22115	0.43914	1.0000
Si	Si38	1.0	0.96038	0.47769	0.45025	1.0000
Si	Si39	1.0	0.52489	0.14778	0.37643	1.0000
Si	Si40	1.0	0.54425	0.33444	0.69235	1.0000
Si	Si41	1.0	0.79682	0.72328	0.68881	1.0000
Si	Si42	1.0	0.54253	0.71169	0.69429	1.0000
Si	Si43	1.0	0.79570	0.96620	0.70044	1.0000
Si	Si44	1.0	0.53811	0.95430	0.69474	1.0000

Si	Si45	1.0	0.21390	0.67101	0.19067	1.0000
Si	Si46	1.0	0.46976	0.66819	0.19636	1.0000
Si	Si47	1.0	0.19975	0.29024	0.19659	1.0000
Si	Si48	1.0	0.45533	0.28459	0.18995	1.0000
Si	Si49	1.0	0.19636	0.04462	0.19699	1.0000
Si	Si50	1.0	0.45420	0.03900	0.19416	1.0000
Si	Si51	1.0	0.14442	0.46856	0.12332	1.0000
Si	Si52	1.0	0.14029	0.86566	0.12339	1.0000
Si	Si53	1.0	0.52466	0.47490	0.12568	1.0000
Si	Si54	1.0	0.84571	0.15397	0.62467	1.0000
Si	Si55	1.0	0.47335	0.52956	0.62567	1.0000
Si	Si56	1.0	0.15664	0.13670	0.37446	1.0000
Si	Si57	1.0	0.53536	0.51510	0.37575	1.0000
Si	Si58	1.0	0.86471	0.84448	0.87339	1.0000
Si	Si59	1.0	0.47054	0.46282	0.87544	1.0000
Si	Si60	1.0	0.79882	0.34166	0.70209	1.0000
Si	Si61	1.0	0.45466	0.70409	0.31079	1.0000

T2T7T9:

```
data_image0
  _chemical_formula_structural      H3O128Al3Si61
  _chemical_formula_sum            "H3 O128 Al3 Si61"
  _cell_length_a                  12.5511
  _cell_length_b                  12.5779
  _cell_length_c                  26.5121
  _cell_angle_alpha                89.8346
  _cell_angle_beta                 90.1892
  _cell_angle_gamma                90.3142

  _space_group_name_H-M_alt       "P 1"
  _space_group_IT_number          1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy

    H   H1        1.0  0.48034  0.15996  0.53838  1.0000
    H   H2        1.0  0.06427  0.97463  0.36067  1.0000
    H   H3        1.0  0.55640  0.16284  0.15387  1.0000
    O   O1        1.0  0.30683  0.66575  0.06533  1.0000
    O   O2        1.0  0.34509  0.81617  0.99652  1.0000
    O   O3        1.0  0.23262  0.85899  0.07895  1.0000
    O   O4        1.0  0.44208  0.82592  0.08370  1.0000
    O   O5        1.0  0.34893  0.52101  0.99417  1.0000
```

O	O6	1.0	0.24062	0.46657	0.07530	1.0000
O	O7	1.0	0.44820	0.51214	0.08128	1.0000
O	O8	1.0	0.70789	0.66937	0.06646	1.0000
O	O9	1.0	0.83528	0.83712	0.05606	1.0000
O	O10	1.0	0.64827	0.86060	0.09640	1.0000
O	O11	1.0	0.83884	0.50304	0.06546	1.0000
O	O12	1.0	0.64990	0.48767	0.10730	1.0000
O	O13	1.0	0.96737	0.67107	0.05616	1.0000
O	O14	1.0	0.02359	0.85262	0.09787	1.0000
O	O15	1.0	0.03461	0.49194	0.09752	1.0000
O	O16	1.0	0.67057	0.32666	0.56133	1.0000
O	O17	1.0	0.66748	0.17185	0.49136	1.0000
O	O18	1.0	0.74277	0.13552	0.58421	1.0000
O	O19	1.0	0.53467	0.16020	0.56600	1.0000
O	O20	1.0	0.66395	0.49296	0.49987	1.0000
O	O21	1.0	0.77122	0.50436	0.58561	1.0000
O	O22	1.0	0.55811	0.49827	0.58421	1.0000
O	O23	1.0	0.28016	0.33768	0.56767	1.0000
O	O24	1.0	0.15116	0.17000	0.55948	1.0000
O	O25	1.0	0.33475	0.15525	0.61077	1.0000
O	O26	1.0	0.16552	0.51029	0.55443	1.0000
O	O27	1.0	0.35159	0.52375	0.59958	1.0000
O	O28	1.0	0.03080	0.34239	0.55587	1.0000
O	O29	1.0	0.95340	0.16778	0.59774	1.0000
O	O30	1.0	0.98114	0.52639	0.59761	1.0000
O	O31	1.0	0.33651	0.37324	0.30867	1.0000
O	O32	1.0	0.17279	0.34249	0.24696	1.0000
O	O33	1.0	0.19727	0.21614	0.32747	1.0000
O	O34	1.0	0.14154	0.42053	0.33707	1.0000
O	O35	1.0	0.49526	0.33038	0.24532	1.0000
O	O36	1.0	0.48621	0.23129	0.33259	1.0000
O	O37	1.0	0.53251	0.44039	0.32717	1.0000
O	O38	1.0	0.32616	0.71024	0.30902	1.0000
O	O39	1.0	0.15015	0.82353	0.30611	1.0000

O	O40	1.0	0.14549	0.63277	0.34470	1.0000
O	O41	1.0	0.48982	0.83877	0.32190	1.0000
O	O42	1.0	0.49700	0.64160	0.35532	1.0000
O	O43	1.0	0.31754	0.96032	0.31093	1.0000
O	O44	1.0	0.48485	0.02984	0.36123	1.0000
O	O45	1.0	0.66528	0.68710	0.81673	1.0000
O	O46	1.0	0.81876	0.65502	0.74853	1.0000
O	O47	1.0	0.85868	0.76239	0.83166	1.0000
O	O48	1.0	0.82452	0.55330	0.83487	1.0000
O	O49	1.0	0.51925	0.64617	0.74583	1.0000
O	O50	1.0	0.47074	0.76165	0.82653	1.0000
O	O51	1.0	0.50325	0.55312	0.83330	1.0000
O	O52	1.0	0.67378	0.29464	0.81785	1.0000
O	O53	1.0	0.84011	0.16293	0.81225	1.0000
O	O54	1.0	0.86339	0.35062	0.85213	1.0000
O	O55	1.0	0.50777	0.16218	0.81261	1.0000
O	O56	1.0	0.48578	0.34793	0.85371	1.0000
O	O57	1.0	0.67369	0.03174	0.80470	1.0000
O	O58	1.0	0.85283	0.97116	0.84827	1.0000
O	O59	1.0	0.49525	0.96835	0.84627	1.0000
O	O60	1.0	0.68179	0.65426	0.93699	1.0000
O	O61	1.0	0.66017	0.81853	0.99911	1.0000
O	O62	1.0	0.77692	0.83725	0.91725	1.0000
O	O63	1.0	0.56520	0.82227	0.91141	1.0000
O	O64	1.0	0.66516	0.50308	0.00759	1.0000
O	O65	1.0	0.77232	0.46808	0.92342	1.0000
O	O66	1.0	0.55940	0.48192	0.92356	1.0000
O	O67	1.0	0.29729	0.66956	0.92743	1.0000
O	O68	1.0	0.17281	0.83835	0.93912	1.0000
O	O69	1.0	0.36063	0.85993	0.89871	1.0000
O	O70	1.0	0.16849	0.50289	0.94053	1.0000
O	O71	1.0	0.35544	0.47916	0.89690	1.0000
O	O72	1.0	0.04051	0.67124	0.94183	1.0000
O	O73	1.0	0.98390	0.85379	0.89913	1.0000

O	O74	1.0	0.97706	0.49258	0.89929	1.0000
O	O75	1.0	0.29879	0.32407	0.44107	1.0000
O	O76	1.0	0.34386	0.17732	0.51242	1.0000
O	O77	1.0	0.24955	0.12286	0.42457	1.0000
O	O78	1.0	0.45423	0.18297	0.42987	1.0000
O	O79	1.0	0.34286	0.48658	0.50166	1.0000
O	O80	1.0	0.22764	0.51479	0.41802	1.0000
O	O81	1.0	0.43557	0.47709	0.41346	1.0000
O	O82	1.0	0.69294	0.33976	0.43243	1.0000
O	O83	1.0	0.83214	0.17870	0.42924	1.0000
O	O84	1.0	0.64217	0.15467	0.39149	1.0000
O	O85	1.0	0.82857	0.50328	0.43687	1.0000
O	O86	1.0	0.63808	0.53233	0.40265	1.0000
O	O87	1.0	0.96619	0.34155	0.44028	1.0000
O	O88	1.0	0.02890	0.15858	0.40091	1.0000
O	O89	1.0	0.01833	0.52630	0.39996	1.0000
O	O90	1.0	0.67095	0.37657	0.68977	1.0000
O	O91	1.0	0.83103	0.33344	0.75334	1.0000
O	O92	1.0	0.81332	0.22517	0.66841	1.0000
O	O93	1.0	0.86872	0.42973	0.66764	1.0000
O	O94	1.0	0.51390	0.33587	0.75472	1.0000
O	O95	1.0	0.52524	0.23153	0.66699	1.0000
O	O96	1.0	0.47308	0.43770	0.67128	1.0000
O	O97	1.0	0.67075	0.70547	0.68111	1.0000
O	O98	1.0	0.84271	0.82971	0.69084	1.0000
O	O99	1.0	0.85793	0.64019	0.65140	1.0000
O	O100	1.0	0.50193	0.82749	0.69497	1.0000
O	O101	1.0	0.48347	0.64424	0.64768	1.0000
O	O102	1.0	0.67291	0.95431	0.69410	1.0000
O	O103	1.0	0.85143	0.02131	0.64968	1.0000
O	O104	1.0	0.49531	0.01024	0.64630	1.0000
O	O105	1.0	0.34457	0.68756	0.18888	1.0000
O	O106	1.0	0.17202	0.65522	0.24628	1.0000
O	O107	1.0	0.15962	0.76987	0.16346	1.0000

O	O108	1.0	0.18681	0.55858	0.16055	1.0000
O	O109	1.0	0.50146	0.67561	0.25664	1.0000
O	O110	1.0	0.53837	0.75898	0.16667	1.0000
O	O111	1.0	0.50580	0.55225	0.17657	1.0000
O	O112	1.0	0.32884	0.28398	0.18599	1.0000
O	O113	1.0	0.15143	0.16735	0.19091	1.0000
O	O114	1.0	0.14702	0.35397	0.14763	1.0000
O	O115	1.0	0.50887	0.35697	0.14442	1.0000
O	O116	1.0	0.32082	0.04039	0.19551	1.0000
O	O117	1.0	0.14218	0.97876	0.14990	1.0000
O	O118	1.0	0.51579	0.96725	0.15145	1.0000
O	O119	1.0	0.00556	0.84024	0.99853	1.0000
O	O120	1.0	0.99730	0.50208	0.99876	1.0000
O	O121	1.0	0.98180	0.17344	0.49949	1.0000
O	O122	1.0	0.99212	0.51114	0.49871	1.0000
O	O123	1.0	0.14893	0.99735	0.24959	1.0000
O	O124	1.0	0.49671	0.00746	0.26091	1.0000
O	O125	1.0	0.84516	0.00011	0.74888	1.0000
O	O126	1.0	0.50219	0.00447	0.74703	1.0000
O	O127	1.0	0.13126	0.00641	0.34953	1.0000
O	O128	1.0	0.50604	0.16850	0.18174	1.0000
Al	Al1	1.0	0.46533	0.13780	0.62934	1.0000
Al	Al2	1.0	0.15491	0.14089	0.37816	1.0000
Al	Al3	1.0	0.45587	0.03241	0.20011	1.0000
Si	Si1	1.0	0.33228	0.79243	0.05630	1.0000
Si	Si2	1.0	0.33627	0.54187	0.05397	1.0000
Si	Si3	1.0	0.71297	0.79589	0.05410	1.0000
Si	Si4	1.0	0.71603	0.54157	0.06099	1.0000
Si	Si5	1.0	0.95780	0.79941	0.05190	1.0000
Si	Si6	1.0	0.95968	0.54260	0.05401	1.0000
Si	Si7	1.0	0.53413	0.85501	0.12496	1.0000
Si	Si8	1.0	0.65916	0.20108	0.55036	1.0000
Si	Si9	1.0	0.66590	0.45663	0.55856	1.0000
Si	Si10	1.0	0.27499	0.20884	0.56417	1.0000

Si	Si11	1.0	0.28534	0.46370	0.55587	1.0000
Si	Si12	1.0	0.02984	0.21345	0.55325	1.0000
Si	Si13	1.0	0.04291	0.47068	0.55168	1.0000
Si	Si14	1.0	0.21129	0.33461	0.30586	1.0000
Si	Si15	1.0	0.46173	0.34315	0.30463	1.0000
Si	Si16	1.0	0.19915	0.70377	0.30143	1.0000
Si	Si17	1.0	0.45474	0.71708	0.31036	1.0000
Si	Si18	1.0	0.44917	0.96021	0.31241	1.0000
Si	Si19	1.0	0.13517	0.52128	0.37491	1.0000
Si	Si20	1.0	0.79161	0.66387	0.80803	1.0000
Si	Si21	1.0	0.53952	0.66182	0.80567	1.0000
Si	Si22	1.0	0.80106	0.28507	0.80842	1.0000
Si	Si23	1.0	0.54586	0.28500	0.80885	1.0000
Si	Si24	1.0	0.80220	0.04134	0.80309	1.0000
Si	Si25	1.0	0.54505	0.04144	0.80190	1.0000
Si	Si26	1.0	0.85873	0.46726	0.87758	1.0000
Si	Si27	1.0	0.67058	0.78288	0.94052	1.0000
Si	Si28	1.0	0.66936	0.52721	0.94730	1.0000
Si	Si29	1.0	0.29394	0.79549	0.94082	1.0000
Si	Si30	1.0	0.29155	0.54333	0.93986	1.0000
Si	Si31	1.0	0.05038	0.79985	0.94456	1.0000
Si	Si32	1.0	0.04601	0.54265	0.94508	1.0000
Si	Si33	1.0	0.47431	0.85247	0.87021	1.0000
Si	Si34	1.0	0.33372	0.20020	0.45133	1.0000
Si	Si35	1.0	0.32645	0.45088	0.44340	1.0000
Si	Si36	1.0	0.70959	0.21225	0.43614	1.0000
Si	Si37	1.0	0.70638	0.46609	0.44364	1.0000
Si	Si38	1.0	0.95456	0.21266	0.44208	1.0000
Si	Si39	1.0	0.95135	0.46881	0.44434	1.0000
Si	Si40	1.0	0.51559	0.14964	0.37828	1.0000
Si	Si41	1.0	0.79479	0.34041	0.69470	1.0000
Si	Si42	1.0	0.54484	0.34220	0.69514	1.0000
Si	Si43	1.0	0.79700	0.70885	0.69353	1.0000
Si	Si44	1.0	0.54396	0.70684	0.69266	1.0000

Si	Si45	1.0	0.80145	0.95152	0.69579	1.0000
Si	Si46	1.0	0.54284	0.95059	0.69441	1.0000
Si	Si47	1.0	0.86753	0.52442	0.62588	1.0000
Si	Si48	1.0	0.21622	0.66783	0.18899	1.0000
Si	Si49	1.0	0.47196	0.66929	0.19705	1.0000
Si	Si50	1.0	0.19900	0.28679	0.19343	1.0000
Si	Si51	1.0	0.19419	0.04588	0.19596	1.0000
Si	Si52	1.0	0.15183	0.46884	0.11999	1.0000
Si	Si53	1.0	0.14114	0.86439	0.12235	1.0000
Si	Si54	1.0	0.52809	0.48056	0.12687	1.0000
Si	Si55	1.0	0.84155	0.13895	0.62513	1.0000
Si	Si56	1.0	0.46784	0.52490	0.62624	1.0000
Si	Si57	1.0	0.52416	0.52278	0.37458	1.0000
Si	Si58	1.0	0.86640	0.85557	0.87382	1.0000
Si	Si59	1.0	0.47670	0.46628	0.87670	1.0000
Si	Si60	1.0	0.19282	0.94435	0.30073	1.0000
Si	Si61	1.0	0.45556	0.29262	0.19056	1.0000

T7T7T7:

data_image0

_chemical_formula_structural H3O128Al3Si61

_chemical_formula_sum "H3 O128 Al3 Si61"

_cell_length_a 12.5199

_cell_length_b 12.5931

_cell_length_c 26.4069

_cell_angle_alpha 89.8334

_cell_angle_beta 90.0384

_cell_angle_gamma 90.6074

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48202	0.14652	0.53290	1.0000
H	H2	1.0	0.85911	0.51611	0.71656	1.0000
H	H3	1.0	0.51775	0.84244	0.03618	1.0000
O	O1	1.0	0.32318	0.67339	0.05996	1.0000
O	O2	1.0	0.33496	0.82709	0.98898	1.0000
O	O3	1.0	0.25775	0.86735	0.08152	1.0000
O	O4	1.0	0.32717	0.49759	0.00394	1.0000
O	O5	1.0	0.25453	0.48719	0.09707	1.0000

O	O6	1.0	0.45996	0.51907	0.07956	1.0000
O	O7	1.0	0.72007	0.65747	0.06110	1.0000
O	O8	1.0	0.85001	0.82493	0.05567	1.0000
O	O9	1.0	0.66638	0.83783	0.10693	1.0000
O	O10	1.0	0.84347	0.48831	0.06372	1.0000
O	O11	1.0	0.65538	0.47503	0.10326	1.0000
O	O12	1.0	0.97695	0.65588	0.05686	1.0000
O	O13	1.0	0.04744	0.83650	0.09392	1.0000
O	O14	1.0	0.04329	0.46918	0.08907	1.0000
O	O15	1.0	0.63325	0.33084	0.55284	1.0000
O	O16	1.0	0.68494	0.17259	0.49047	1.0000
O	O17	1.0	0.73966	0.15989	0.58800	1.0000
O	O18	1.0	0.53701	0.14239	0.56014	1.0000
O	O19	1.0	0.67997	0.50587	0.50027	1.0000
O	O20	1.0	0.76707	0.47174	0.59135	1.0000
O	O21	1.0	0.55910	0.51796	0.58032	1.0000
O	O22	1.0	0.28071	0.33180	0.57011	1.0000
O	O23	1.0	0.15194	0.16380	0.55463	1.0000
O	O24	1.0	0.33428	0.14428	0.60620	1.0000
O	O25	1.0	0.16793	0.50168	0.54982	1.0000
O	O26	1.0	0.35053	0.52085	0.60080	1.0000
O	O27	1.0	0.03213	0.33533	0.55615	1.0000
O	O28	1.0	0.95428	0.15460	0.59383	1.0000
O	O29	1.0	0.99380	0.51282	0.60599	1.0000
O	O30	1.0	0.33896	0.38155	0.31116	1.0000
O	O31	1.0	0.16908	0.33402	0.25364	1.0000
O	O32	1.0	0.20048	0.23023	0.33864	1.0000
O	O33	1.0	0.14405	0.43429	0.34006	1.0000
O	O34	1.0	0.49662	0.34650	0.24483	1.0000
O	O35	1.0	0.48910	0.24094	0.33200	1.0000
O	O36	1.0	0.53747	0.44862	0.32840	1.0000
O	O37	1.0	0.33032	0.71869	0.30702	1.0000
O	O38	1.0	0.15781	0.83673	0.31410	1.0000
O	O39	1.0	0.15762	0.64487	0.35130	1.0000

O	O40	1.0	0.50144	0.84151	0.31323	1.0000
O	O41	1.0	0.50258	0.65076	0.35417	1.0000
O	O42	1.0	0.32917	0.96582	0.30816	1.0000
O	O43	1.0	0.14665	0.02823	0.34866	1.0000
O	O44	1.0	0.50879	0.03452	0.34841	1.0000
O	O45	1.0	0.67336	0.62905	0.81105	1.0000
O	O46	1.0	0.82983	0.65813	0.74150	1.0000
O	O47	1.0	0.83383	0.76405	0.82847	1.0000
O	O48	1.0	0.86422	0.55226	0.82355	1.0000
O	O49	1.0	0.50881	0.64840	0.74863	1.0000
O	O50	1.0	0.53051	0.77723	0.82823	1.0000
O	O51	1.0	0.47903	0.57410	0.84131	1.0000
O	O52	1.0	0.65469	0.28842	0.80857	1.0000
O	O53	1.0	0.82057	0.16114	0.82601	1.0000
O	O54	1.0	0.82254	0.35720	0.85828	1.0000
O	O55	1.0	0.48457	0.16410	0.81644	1.0000
O	O56	1.0	0.47149	0.36194	0.84295	1.0000
O	O57	1.0	0.65329	0.03415	0.81087	1.0000
O	O58	1.0	0.82695	0.96419	0.85689	1.0000
O	O59	1.0	0.47068	0.97231	0.84995	1.0000
O	O60	1.0	0.62943	0.66001	0.94322	1.0000
O	O61	1.0	0.65792	0.82185	0.00781	1.0000
O	O62	1.0	0.77210	0.81160	0.92270	1.0000
O	O63	1.0	0.56213	0.85332	0.92129	1.0000
O	O64	1.0	0.67473	0.49383	0.00221	1.0000
O	O65	1.0	0.78192	0.52637	0.91619	1.0000
O	O66	1.0	0.57723	0.46538	0.91458	1.0000
O	O67	1.0	0.29186	0.65199	0.93883	1.0000
O	O68	1.0	0.16964	0.82187	0.92569	1.0000
O	O69	1.0	0.36407	0.81651	0.88899	1.0000
O	O70	1.0	0.16640	0.48330	0.93816	1.0000
O	O71	1.0	0.36393	0.46598	0.90763	1.0000
O	O72	1.0	0.03926	0.65439	0.93231	1.0000
O	O73	1.0	0.97217	0.83931	0.89653	1.0000

O	O74	1.0	0.98090	0.46761	0.89502	1.0000
O	O75	1.0	0.31759	0.32603	0.43514	1.0000
O	O76	1.0	0.34547	0.17954	0.50870	1.0000
O	O77	1.0	0.23436	0.13353	0.42587	1.0000
O	O78	1.0	0.44745	0.16086	0.42367	1.0000
O	O79	1.0	0.35400	0.47536	0.50395	1.0000
O	O80	1.0	0.23902	0.51760	0.42150	1.0000
O	O81	1.0	0.44807	0.49045	0.41642	1.0000
O	O82	1.0	0.67970	0.34730	0.43449	1.0000
O	O83	1.0	0.83814	0.20673	0.42286	1.0000
O	O84	1.0	0.64548	0.16260	0.39098	1.0000
O	O85	1.0	0.83681	0.49044	0.43240	1.0000
O	O86	1.0	0.64849	0.54405	0.40200	1.0000
O	O87	1.0	0.99375	0.34845	0.44090	1.0000
O	O88	1.0	0.03402	0.16672	0.39686	1.0000
O	O89	1.0	0.03094	0.54165	0.40863	1.0000
O	O90	1.0	0.67079	0.36327	0.69691	1.0000
O	O91	1.0	0.83420	0.31866	0.75884	1.0000
O	O92	1.0	0.84336	0.26111	0.66153	1.0000
O	O93	1.0	0.49176	0.31689	0.74629	1.0000
O	O94	1.0	0.52858	0.23414	0.65528	1.0000
O	O95	1.0	0.48603	0.44155	0.66796	1.0000
O	O96	1.0	0.66457	0.71822	0.68798	1.0000
O	O97	1.0	0.83594	0.84744	0.69292	1.0000
O	O98	1.0	0.84527	0.66534	0.64243	1.0000
O	O99	1.0	0.49035	0.83016	0.69924	1.0000
O	O100	1.0	0.48024	0.64833	0.64945	1.0000
O	O101	1.0	0.66152	0.96121	0.70076	1.0000
O	O102	1.0	0.83597	0.04809	0.65928	1.0000
O	O103	1.0	0.49010	0.00876	0.64782	1.0000
O	O104	1.0	0.32926	0.62475	0.19437	1.0000
O	O105	1.0	0.16042	0.67148	0.25175	1.0000
O	O106	1.0	0.18861	0.77237	0.16461	1.0000
O	O107	1.0	0.13121	0.56932	0.16726	1.0000

O	O108	1.0	0.49911	0.66941	0.25384	1.0000
O	O109	1.0	0.47494	0.76233	0.16322	1.0000
O	O110	1.0	0.52545	0.55731	0.17348	1.0000
O	O111	1.0	0.32725	0.29568	0.18983	1.0000
O	O112	1.0	0.15824	0.16604	0.19130	1.0000
O	O113	1.0	0.13987	0.35802	0.15574	1.0000
O	O114	1.0	0.49806	0.17193	0.18912	1.0000
O	O115	1.0	0.50366	0.35789	0.14387	1.0000
O	O116	1.0	0.32953	0.04138	0.19120	1.0000
O	O117	1.0	0.14827	0.97683	0.14923	1.0000
O	O118	1.0	0.51204	0.98383	0.14792	1.0000
O	O119	1.0	0.01776	0.81818	0.99511	1.0000
O	O120	1.0	0.99120	0.49336	0.99353	1.0000
O	O121	1.0	0.98108	0.17249	0.49550	1.0000
O	O122	1.0	0.97932	0.50866	0.50575	1.0000
O	O123	1.0	0.16062	0.99571	0.24907	1.0000
O	O124	1.0	0.49756	0.00298	0.24870	1.0000
O	O125	1.0	0.83058	0.00768	0.75747	1.0000
O	O126	1.0	0.48574	0.00912	0.74961	1.0000
O	O127	1.0	0.85671	0.46383	0.68856	1.0000
O	O128	1.0	0.46522	0.83919	0.06435	1.0000
Al	Al1	1.0	0.46576	0.13173	0.62381	1.0000
Al	Al2	1.0	0.86583	0.53571	0.62509	1.0000
Al	Al3	1.0	0.53748	0.85814	0.12766	1.0000
Si	Si1	1.0	0.34060	0.54427	0.06055	1.0000
Si	Si2	1.0	0.72568	0.78627	0.05986	1.0000
Si	Si3	1.0	0.72211	0.52922	0.05747	1.0000
Si	Si4	1.0	0.97219	0.78384	0.05061	1.0000
Si	Si5	1.0	0.96345	0.52820	0.05094	1.0000
Si	Si6	1.0	0.65485	0.20582	0.54777	1.0000
Si	Si7	1.0	0.66244	0.45848	0.55715	1.0000
Si	Si8	1.0	0.27520	0.20436	0.56127	1.0000
Si	Si9	1.0	0.28767	0.45729	0.55644	1.0000
Si	Si10	1.0	0.03045	0.20784	0.55028	1.0000

Si	Si11	1.0	0.04340	0.46486	0.55557	1.0000
Si	Si12	1.0	0.21338	0.34509	0.31115	1.0000
Si	Si13	1.0	0.46546	0.35370	0.30425	1.0000
Si	Si14	1.0	0.20169	0.71765	0.30585	1.0000
Si	Si15	1.0	0.45917	0.72000	0.30687	1.0000
Si	Si16	1.0	0.20003	0.95710	0.30469	1.0000
Si	Si17	1.0	0.45851	0.96129	0.30383	1.0000
Si	Si18	1.0	0.14435	0.53280	0.38003	1.0000
Si	Si19	1.0	0.79948	0.65348	0.80158	1.0000
Si	Si20	1.0	0.54687	0.65721	0.80701	1.0000
Si	Si21	1.0	0.78260	0.28067	0.81302	1.0000
Si	Si22	1.0	0.52582	0.28300	0.80304	1.0000
Si	Si23	1.0	0.78236	0.04075	0.81229	1.0000
Si	Si24	1.0	0.52438	0.04441	0.80563	1.0000
Si	Si25	1.0	0.86042	0.47575	0.87353	1.0000
Si	Si26	1.0	0.65686	0.78633	0.94808	1.0000
Si	Si27	1.0	0.66634	0.53579	0.94421	1.0000
Si	Si28	1.0	0.28942	0.77951	0.93541	1.0000
Si	Si29	1.0	0.28743	0.52492	0.94710	1.0000
Si	Si30	1.0	0.04831	0.78258	0.93791	1.0000
Si	Si31	1.0	0.04528	0.52642	0.94021	1.0000
Si	Si32	1.0	0.48269	0.85376	0.87207	1.0000
Si	Si33	1.0	0.33558	0.20092	0.44761	1.0000
Si	Si34	1.0	0.33945	0.45287	0.44403	1.0000
Si	Si35	1.0	0.71291	0.22314	0.43463	1.0000
Si	Si36	1.0	0.71130	0.47211	0.44304	1.0000
Si	Si37	1.0	0.96178	0.22335	0.43947	1.0000
Si	Si38	1.0	0.95983	0.47220	0.44769	1.0000
Si	Si39	1.0	0.52185	0.15086	0.37302	1.0000
Si	Si40	1.0	0.54255	0.33629	0.69024	1.0000
Si	Si41	1.0	0.79402	0.72476	0.68939	1.0000
Si	Si42	1.0	0.53632	0.71130	0.69573	1.0000
Si	Si43	1.0	0.79001	0.96623	0.70202	1.0000
Si	Si44	1.0	0.53144	0.95317	0.69812	1.0000

Si	Si45	1.0	0.20439	0.66014	0.19431	1.0000
Si	Si46	1.0	0.45725	0.65638	0.19569	1.0000
Si	Si47	1.0	0.19953	0.28757	0.19812	1.0000
Si	Si48	1.0	0.45644	0.29244	0.19208	1.0000
Si	Si49	1.0	0.20097	0.04507	0.19541	1.0000
Si	Si50	1.0	0.45982	0.04824	0.19342	1.0000
Si	Si51	1.0	0.14279	0.47172	0.12764	1.0000
Si	Si52	1.0	0.15922	0.86180	0.12280	1.0000
Si	Si53	1.0	0.53504	0.47727	0.12595	1.0000
Si	Si54	1.0	0.84365	0.15533	0.62552	1.0000
Si	Si55	1.0	0.46995	0.53107	0.62440	1.0000
Si	Si56	1.0	0.15337	0.14091	0.37739	1.0000
Si	Si57	1.0	0.53294	0.53382	0.37468	1.0000
Si	Si58	1.0	0.85057	0.84467	0.87591	1.0000
Si	Si59	1.0	0.47467	0.46796	0.87652	1.0000
Si	Si60	1.0	0.79702	0.34521	0.70144	1.0000
Si	Si61	1.0	0.33997	0.79874	0.04869	1.0000

T7T7T9:

data_image0
_chemical_formula_structural H3O128Al3Si61
_chemical_formula_sum "H3 O128 Al3 Si61"
_cell_length_a 12.5638
_cell_length_b 12.5205
_cell_length_c 26.4643
_cell_angle_alpha 90.2054
_cell_angle_beta 90.3564
_cell_angle_gamma 90.4529

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47953	0.14820	0.53451	1.0000
H	H2	1.0	0.85558	0.51496	0.71751	1.0000
H	H3	1.0	0.06963	0.97258	0.35894	1.0000
O	O1	1.0	0.32203	0.65740	0.06727	1.0000
O	O2	1.0	0.34625	0.81307	0.99938	1.0000
O	O3	1.0	0.22436	0.84188	0.07909	1.0000
O	O4	1.0	0.43426	0.83364	0.08850	1.0000
O	O5	1.0	0.34456	0.51386	0.99279	1.0000

O	O6	1.0	0.23146	0.46542	0.07289	1.0000
O	O7	1.0	0.44298	0.48609	0.07900	1.0000
O	O8	1.0	0.69878	0.67247	0.06421	1.0000
O	O9	1.0	0.83204	0.83716	0.05916	1.0000
O	O10	1.0	0.64232	0.86423	0.09638	1.0000
O	O11	1.0	0.83342	0.50738	0.06407	1.0000
O	O12	1.0	0.64605	0.48899	0.10510	1.0000
O	O13	1.0	0.96734	0.67166	0.05761	1.0000
O	O14	1.0	0.01935	0.85376	0.10125	1.0000
O	O15	1.0	0.02793	0.48840	0.09788	1.0000
O	O16	1.0	0.63711	0.32807	0.55372	1.0000
O	O17	1.0	0.67959	0.16601	0.49070	1.0000
O	O18	1.0	0.74084	0.15454	0.58735	1.0000
O	O19	1.0	0.53568	0.14327	0.56144	1.0000
O	O20	1.0	0.68127	0.50346	0.50194	1.0000
O	O21	1.0	0.76821	0.47156	0.59308	1.0000
O	O22	1.0	0.56028	0.51469	0.58183	1.0000
O	O23	1.0	0.28074	0.33271	0.56776	1.0000
O	O24	1.0	0.15423	0.16059	0.55565	1.0000
O	O25	1.0	0.33517	0.14891	0.60848	1.0000
O	O26	1.0	0.16900	0.50533	0.55083	1.0000
O	O27	1.0	0.35262	0.51984	0.60091	1.0000
O	O28	1.0	0.03779	0.33409	0.55323	1.0000
O	O29	1.0	0.95598	0.15718	0.59309	1.0000
O	O30	1.0	0.99453	0.50821	0.60523	1.0000
O	O31	1.0	0.34089	0.37864	0.31083	1.0000
O	O32	1.0	0.17826	0.34597	0.24767	1.0000
O	O33	1.0	0.20331	0.21668	0.32619	1.0000
O	O34	1.0	0.14445	0.42029	0.33952	1.0000
O	O35	1.0	0.49766	0.33649	0.24593	1.0000
O	O36	1.0	0.48658	0.23194	0.33224	1.0000
O	O37	1.0	0.53993	0.44006	0.32944	1.0000
O	O38	1.0	0.33084	0.70932	0.31002	1.0000
O	O39	1.0	0.15498	0.82099	0.30395	1.0000

O	O40	1.0	0.15106	0.63301	0.34647	1.0000
O	O41	1.0	0.49750	0.83630	0.31567	1.0000
O	O42	1.0	0.50474	0.64335	0.35504	1.0000
O	O43	1.0	0.32332	0.95798	0.31015	1.0000
O	O44	1.0	0.49758	0.02835	0.35555	1.0000
O	O45	1.0	0.67331	0.68584	0.81579	1.0000
O	O46	1.0	0.82174	0.65525	0.74294	1.0000
O	O47	1.0	0.86824	0.76043	0.82794	1.0000
O	O48	1.0	0.83396	0.54881	0.82601	1.0000
O	O49	1.0	0.52266	0.64699	0.74753	1.0000
O	O50	1.0	0.47872	0.75892	0.83126	1.0000
O	O51	1.0	0.51173	0.55131	0.83437	1.0000
O	O52	1.0	0.66127	0.32197	0.81481	1.0000
O	O53	1.0	0.79764	0.15953	0.82695	1.0000
O	O54	1.0	0.84877	0.35156	0.85798	1.0000
O	O55	1.0	0.52102	0.16244	0.81725	1.0000
O	O56	1.0	0.46553	0.34850	0.84834	1.0000
O	O57	1.0	0.65750	0.00128	0.80946	1.0000
O	O58	1.0	0.84175	0.96453	0.85308	1.0000
O	O59	1.0	0.46375	0.96961	0.84125	1.0000
O	O60	1.0	0.63133	0.66053	0.93722	1.0000
O	O61	1.0	0.66235	0.82758	0.99819	1.0000
O	O62	1.0	0.77910	0.80748	0.91606	1.0000
O	O63	1.0	0.57275	0.85545	0.90939	1.0000
O	O64	1.0	0.66171	0.50511	0.00507	1.0000
O	O65	1.0	0.76519	0.50200	0.91857	1.0000
O	O66	1.0	0.55475	0.46459	0.92250	1.0000
O	O67	1.0	0.28479	0.66891	0.93107	1.0000
O	O68	1.0	0.17121	0.84389	0.94352	1.0000
O	O69	1.0	0.36063	0.85368	0.90220	1.0000
O	O70	1.0	0.16286	0.49749	0.93930	1.0000
O	O71	1.0	0.35074	0.48698	0.89422	1.0000
O	O72	1.0	0.04306	0.67241	0.94504	1.0000
O	O73	1.0	0.98261	0.85183	0.90086	1.0000

O	O74	1.0	0.97150	0.49817	0.89887	1.0000
O	O75	1.0	0.31112	0.32270	0.43828	1.0000
O	O76	1.0	0.34753	0.17488	0.51052	1.0000
O	O77	1.0	0.24939	0.12282	0.42342	1.0000
O	O78	1.0	0.45728	0.17108	0.42841	1.0000
O	O79	1.0	0.35158	0.48068	0.50313	1.0000
O	O80	1.0	0.23973	0.51588	0.41859	1.0000
O	O81	1.0	0.44674	0.48172	0.41608	1.0000
O	O82	1.0	0.68419	0.34252	0.43619	1.0000
O	O83	1.0	0.83592	0.19408	0.42540	1.0000
O	O84	1.0	0.64657	0.15803	0.39023	1.0000
O	O85	1.0	0.83660	0.49182	0.43354	1.0000
O	O86	1.0	0.64717	0.53841	0.40404	1.0000
O	O87	1.0	0.98672	0.34172	0.44054	1.0000
O	O88	1.0	0.02913	0.15644	0.39644	1.0000
O	O89	1.0	0.03048	0.53220	0.40640	1.0000
O	O90	1.0	0.67237	0.36357	0.69762	1.0000
O	O91	1.0	0.83443	0.31082	0.75877	1.0000
O	O92	1.0	0.84223	0.25851	0.66111	1.0000
O	O93	1.0	0.49857	0.32007	0.74992	1.0000
O	O94	1.0	0.52988	0.22955	0.65956	1.0000
O	O95	1.0	0.48565	0.43874	0.66897	1.0000
O	O96	1.0	0.66824	0.71864	0.68215	1.0000
O	O97	1.0	0.83930	0.84597	0.69566	1.0000
O	O98	1.0	0.85461	0.66304	0.64515	1.0000
O	O99	1.0	0.49755	0.83124	0.70095	1.0000
O	O100	1.0	0.48054	0.64757	0.65013	1.0000
O	O101	1.0	0.66671	0.96405	0.69547	1.0000
O	O102	1.0	0.84449	0.04348	0.65653	1.0000
O	O103	1.0	0.49065	0.00354	0.64401	1.0000
O	O104	1.0	0.34314	0.69050	0.18811	1.0000
O	O105	1.0	0.17698	0.64692	0.24739	1.0000
O	O106	1.0	0.15552	0.77267	0.16835	1.0000
O	O107	1.0	0.18362	0.56232	0.15776	1.0000

O	O108	1.0	0.50031	0.66410	0.25518	1.0000
O	O109	1.0	0.53891	0.75700	0.16769	1.0000
O	O110	1.0	0.49735	0.54904	0.17185	1.0000
O	O111	1.0	0.33417	0.29744	0.18398	1.0000
O	O112	1.0	0.16738	0.16819	0.19106	1.0000
O	O113	1.0	0.14525	0.35488	0.14873	1.0000
O	O114	1.0	0.49799	0.16230	0.18898	1.0000
O	O115	1.0	0.52118	0.34788	0.14623	1.0000
O	O116	1.0	0.33132	0.03052	0.19298	1.0000
O	O117	1.0	0.15121	0.98016	0.14754	1.0000
O	O118	1.0	0.51642	0.96658	0.15699	1.0000
O	O119	1.0	0.00080	0.84294	0.00091	1.0000
O	O120	1.0	0.99329	0.50150	0.99882	1.0000
O	O121	1.0	0.98454	0.16634	0.49543	1.0000
O	O122	1.0	0.98409	0.50825	0.50416	1.0000
O	O123	1.0	0.15939	0.99566	0.24753	1.0000
O	O124	1.0	0.49423	0.00398	0.25528	1.0000
O	O125	1.0	0.83228	0.01669	0.75469	1.0000
O	O126	1.0	0.49443	0.02016	0.74454	1.0000
O	O127	1.0	0.85911	0.46082	0.69004	1.0000
O	O128	1.0	0.13587	0.00509	0.34728	1.0000
Al	Al1	1.0	0.46641	0.13121	0.62483	1.0000
Al	Al2	1.0	0.86938	0.53241	0.62663	1.0000
Al	Al3	1.0	0.15713	0.14143	0.37597	1.0000
Si	Si1	1.0	0.33216	0.78597	0.05874	1.0000
Si	Si2	1.0	0.33543	0.53111	0.05323	1.0000
Si	Si3	1.0	0.70893	0.79984	0.05403	1.0000
Si	Si4	1.0	0.71040	0.54396	0.05916	1.0000
Si	Si5	1.0	0.95462	0.80039	0.05437	1.0000
Si	Si6	1.0	0.95572	0.54269	0.05426	1.0000
Si	Si7	1.0	0.53212	0.85479	0.12745	1.0000
Si	Si8	1.0	0.65445	0.20173	0.54815	1.0000
Si	Si9	1.0	0.66424	0.45644	0.55875	1.0000
Si	Si10	1.0	0.27637	0.20370	0.56199	1.0000

Si	Si11	1.0	0.28823	0.45930	0.55592	1.0000
Si	Si12	1.0	0.03353	0.20559	0.54951	1.0000
Si	Si13	1.0	0.04598	0.46416	0.55454	1.0000
Si	Si14	1.0	0.21638	0.33756	0.30681	1.0000
Si	Si15	1.0	0.46571	0.34621	0.30504	1.0000
Si	Si16	1.0	0.20407	0.70020	0.30196	1.0000
Si	Si17	1.0	0.45938	0.71265	0.30875	1.0000
Si	Si18	1.0	0.45387	0.95693	0.30896	1.0000
Si	Si19	1.0	0.14284	0.52220	0.37777	1.0000
Si	Si20	1.0	0.79810	0.66362	0.80351	1.0000
Si	Si21	1.0	0.54610	0.66131	0.80732	1.0000
Si	Si22	1.0	0.78482	0.28492	0.81457	1.0000
Si	Si23	1.0	0.53645	0.28803	0.80642	1.0000
Si	Si24	1.0	0.78241	0.03547	0.81054	1.0000
Si	Si25	1.0	0.53420	0.03866	0.80219	1.0000
Si	Si26	1.0	0.85375	0.47564	0.87602	1.0000
Si	Si27	1.0	0.66145	0.78756	0.93970	1.0000
Si	Si28	1.0	0.65372	0.53343	0.94545	1.0000
Si	Si29	1.0	0.29029	0.79493	0.94434	1.0000
Si	Si30	1.0	0.28503	0.54126	0.93964	1.0000
Si	Si31	1.0	0.04919	0.80190	0.94755	1.0000
Si	Si32	1.0	0.04278	0.54297	0.94559	1.0000
Si	Si33	1.0	0.47062	0.85781	0.87107	1.0000
Si	Si34	1.0	0.33824	0.19709	0.44938	1.0000
Si	Si35	1.0	0.33710	0.45012	0.44396	1.0000
Si	Si36	1.0	0.71234	0.21630	0.43579	1.0000
Si	Si37	1.0	0.71275	0.46857	0.44499	1.0000
Si	Si38	1.0	0.96062	0.21410	0.43915	1.0000
Si	Si39	1.0	0.95944	0.46744	0.44707	1.0000
Si	Si40	1.0	0.52094	0.14866	0.37617	1.0000
Si	Si41	1.0	0.54435	0.33538	0.69276	1.0000
Si	Si42	1.0	0.79635	0.72340	0.68993	1.0000
Si	Si43	1.0	0.54235	0.71142	0.69481	1.0000
Si	Si44	1.0	0.79457	0.96719	0.70014	1.0000

Si	Si45	1.0	0.53698	0.95478	0.69491	1.0000
Si	Si46	1.0	0.21529	0.66735	0.18962	1.0000
Si	Si47	1.0	0.46952	0.66465	0.19547	1.0000
Si	Si48	1.0	0.20660	0.29209	0.19359	1.0000
Si	Si49	1.0	0.46184	0.28606	0.19184	1.0000
Si	Si50	1.0	0.20346	0.04519	0.19438	1.0000
Si	Si51	1.0	0.45974	0.04077	0.19863	1.0000
Si	Si52	1.0	0.14681	0.46794	0.11926	1.0000
Si	Si53	1.0	0.13887	0.86100	0.12402	1.0000
Si	Si54	1.0	0.52630	0.46923	0.12536	1.0000
Si	Si55	1.0	0.84600	0.15314	0.62431	1.0000
Si	Si56	1.0	0.47101	0.52887	0.62545	1.0000
Si	Si57	1.0	0.53331	0.52543	0.37599	1.0000
Si	Si58	1.0	0.86611	0.84641	0.87444	1.0000
Si	Si59	1.0	0.47084	0.46442	0.87521	1.0000
Si	Si60	1.0	0.79782	0.34213	0.70197	1.0000
Si	Si61	1.0	0.19855	0.94177	0.29934	1.0000

AlSiAl-T7T7T9

data_image0
_chemical_formula_structural H3O128Al3Si61
_chemical_formula_sum "H3 O128 Al3 Si61"
_cell_length_a 12.5629
_cell_length_b 12.5036
_cell_length_c 26.4085
_cell_angle_alpha 90.4209
_cell_angle_beta 90.376
_cell_angle_gamma 90.6339

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47868	0.14917	0.52961	1.0000
H	H2	1.0	0.85286	0.51118	0.71984	1.0000
H	H3	1.0	0.92659	0.98606	0.64277	1.0000
O	O1	1.0	0.31151	0.65822	0.06552	1.0000
O	O2	1.0	0.34519	0.81586	0.99974	1.0000
O	O3	1.0	0.22449	0.84709	0.07975	1.0000
O	O4	1.0	0.43470	0.82622	0.08890	1.0000
O	O5	1.0	0.34100	0.51092	0.99301	1.0000

O	O6	1.0	0.23032	0.46415	0.07532	1.0000
O	O7	1.0	0.44264	0.49353	0.07801	1.0000
O	O8	1.0	0.70329	0.67471	0.06452	1.0000
O	O9	1.0	0.83039	0.84397	0.05764	1.0000
O	O10	1.0	0.64117	0.86500	0.09693	1.0000
O	O11	1.0	0.83244	0.50578	0.06266	1.0000
O	O12	1.0	0.64576	0.49272	0.10630	1.0000
O	O13	1.0	0.96024	0.67470	0.05669	1.0000
O	O14	1.0	0.01803	0.85678	0.10042	1.0000
O	O15	1.0	0.02728	0.49750	0.10065	1.0000
O	O16	1.0	0.63958	0.32489	0.54965	1.0000
O	O17	1.0	0.68273	0.16526	0.48618	1.0000
O	O18	1.0	0.73567	0.14719	0.58480	1.0000
O	O19	1.0	0.53517	0.14208	0.55631	1.0000
O	O20	1.0	0.68244	0.50534	0.50230	1.0000
O	O21	1.0	0.76902	0.46616	0.59343	1.0000
O	O22	1.0	0.56118	0.50689	0.58263	1.0000
O	O23	1.0	0.28504	0.32819	0.56574	1.0000
O	O24	1.0	0.16130	0.15408	0.54876	1.0000
O	O25	1.0	0.33856	0.14153	0.60386	1.0000
O	O26	1.0	0.17023	0.50090	0.55439	1.0000
O	O27	1.0	0.35457	0.51226	0.60363	1.0000
O	O28	1.0	0.04326	0.32645	0.55222	1.0000
O	O29	1.0	0.96843	0.14275	0.58967	1.0000
O	O30	1.0	0.99633	0.49373	0.60970	1.0000
O	O31	1.0	0.34090	0.38098	0.31300	1.0000
O	O32	1.0	0.17708	0.34503	0.25050	1.0000
O	O33	1.0	0.20224	0.22291	0.33114	1.0000
O	O34	1.0	0.14506	0.42661	0.34212	1.0000
O	O35	1.0	0.49304	0.34985	0.24400	1.0000
O	O36	1.0	0.48798	0.23250	0.32593	1.0000
O	O37	1.0	0.54086	0.44150	0.33069	1.0000
O	O38	1.0	0.33103	0.71022	0.31369	1.0000
O	O39	1.0	0.15868	0.83027	0.30847	1.0000

O	O40	1.0	0.14724	0.63951	0.34755	1.0000
O	O41	1.0	0.50063	0.83677	0.31452	1.0000
O	O42	1.0	0.50721	0.64551	0.35634	1.0000
O	O43	1.0	0.32856	0.96053	0.30764	1.0000
O	O44	1.0	0.14680	0.02170	0.34866	1.0000
O	O45	1.0	0.50640	0.03022	0.35158	1.0000
O	O46	1.0	0.67032	0.68005	0.81533	1.0000
O	O47	1.0	0.82150	0.64326	0.74480	1.0000
O	O48	1.0	0.86454	0.75619	0.82797	1.0000
O	O49	1.0	0.83081	0.54353	0.82943	1.0000
O	O50	1.0	0.51702	0.64929	0.74738	1.0000
O	O51	1.0	0.47389	0.74284	0.83611	1.0000
O	O52	1.0	0.51345	0.53742	0.83036	1.0000
O	O53	1.0	0.65602	0.31274	0.81731	1.0000
O	O54	1.0	0.79823	0.15629	0.82854	1.0000
O	O55	1.0	0.83953	0.34750	0.86423	1.0000
O	O56	1.0	0.51547	0.15293	0.81890	1.0000
O	O57	1.0	0.46035	0.33983	0.84968	1.0000
O	O58	1.0	0.65848	0.99793	0.80751	1.0000
O	O59	1.0	0.84071	0.96024	0.85313	1.0000
O	O60	1.0	0.46308	0.95373	0.83378	1.0000
O	O61	1.0	0.62520	0.66062	0.93690	1.0000
O	O62	1.0	0.65845	0.82767	0.99829	1.0000
O	O63	1.0	0.77800	0.80425	0.91690	1.0000
O	O64	1.0	0.57388	0.85680	0.90761	1.0000
O	O65	1.0	0.65422	0.50788	0.00665	1.0000
O	O66	1.0	0.76508	0.50585	0.92304	1.0000
O	O67	1.0	0.55514	0.46197	0.92143	1.0000
O	O68	1.0	0.28684	0.66910	0.93153	1.0000
O	O69	1.0	0.17088	0.84295	0.94259	1.0000
O	O70	1.0	0.36119	0.85584	0.90262	1.0000
O	O71	1.0	0.16315	0.49716	0.93774	1.0000
O	O72	1.0	0.35192	0.48784	0.89363	1.0000
O	O73	1.0	0.04273	0.67092	0.94539	1.0000

O	O74	1.0	0.98196	0.84802	0.90003	1.0000
O	O75	1.0	0.96978	0.49346	0.90142	1.0000
O	O76	1.0	0.31208	0.33033	0.43737	1.0000
O	O77	1.0	0.35201	0.17504	0.50563	1.0000
O	O78	1.0	0.23986	0.13565	0.42119	1.0000
O	O79	1.0	0.45142	0.17388	0.42107	1.0000
O	O80	1.0	0.35135	0.48474	0.50455	1.0000
O	O81	1.0	0.25040	0.52695	0.41727	1.0000
O	O82	1.0	0.45540	0.48452	0.41945	1.0000
O	O83	1.0	0.70183	0.34655	0.43555	1.0000
O	O84	1.0	0.84117	0.18870	0.42027	1.0000
O	O85	1.0	0.64696	0.16921	0.38653	1.0000
O	O86	1.0	0.84220	0.50805	0.43596	1.0000
O	O87	1.0	0.65334	0.54063	0.40349	1.0000
O	O88	1.0	0.97914	0.34652	0.44091	1.0000
O	O89	1.0	0.03936	0.17378	0.39220	1.0000
O	O90	1.0	0.04037	0.53729	0.41302	1.0000
O	O91	1.0	0.67205	0.35506	0.70179	1.0000
O	O92	1.0	0.83411	0.31522	0.76436	1.0000
O	O93	1.0	0.84444	0.24919	0.66820	1.0000
O	O94	1.0	0.49540	0.30856	0.75045	1.0000
O	O95	1.0	0.52678	0.23035	0.65686	1.0000
O	O96	1.0	0.49053	0.43916	0.67274	1.0000
O	O97	1.0	0.67045	0.71277	0.68397	1.0000
O	O98	1.0	0.84302	0.83447	0.70092	1.0000
O	O99	1.0	0.85747	0.65531	0.64661	1.0000
O	O100	1.0	0.50361	0.83180	0.69815	1.0000
O	O101	1.0	0.48345	0.64528	0.64909	1.0000
O	O102	1.0	0.67458	0.96317	0.69089	1.0000
O	O103	1.0	0.49946	0.00264	0.63942	1.0000
O	O104	1.0	0.34192	0.69863	0.18859	1.0000
O	O105	1.0	0.17708	0.65699	0.24931	1.0000
O	O106	1.0	0.15124	0.77274	0.16727	1.0000
O	O107	1.0	0.18682	0.56308	0.16107	1.0000

O	O108	1.0	0.49645	0.66171	0.25630	1.0000
O	O109	1.0	0.53763	0.76745	0.17169	1.0000
O	O110	1.0	0.49562	0.55734	0.17054	1.0000
O	O111	1.0	0.32950	0.29979	0.18403	1.0000
O	O112	1.0	0.16241	0.17017	0.19215	1.0000
O	O113	1.0	0.13891	0.35838	0.15151	1.0000
O	O114	1.0	0.49670	0.16874	0.19028	1.0000
O	O115	1.0	0.51482	0.35311	0.14476	1.0000
O	O116	1.0	0.32960	0.03804	0.19279	1.0000
O	O117	1.0	0.14881	0.98210	0.14881	1.0000
O	O118	1.0	0.51076	0.97524	0.15220	1.0000
O	O119	1.0	0.00035	0.84425	0.00010	1.0000
O	O120	1.0	0.99909	0.50143	0.00121	1.0000
O	O121	1.0	0.99054	0.16429	0.49067	1.0000
O	O122	1.0	0.98404	0.50535	0.50914	1.0000
O	O123	1.0	0.16008	0.99799	0.24904	1.0000
O	O124	1.0	0.49805	0.00110	0.25153	1.0000
O	O125	1.0	0.83465	0.01527	0.75490	1.0000
O	O126	1.0	0.50269	0.02271	0.74011	1.0000
O	O127	1.0	0.85659	0.45609	0.69253	1.0000
O	O128	1.0	0.86233	0.02063	0.65530	1.0000
Al	Al1	1.0	0.47070	0.12988	0.62024	1.0000
Al	Al2	1.0	0.87045	0.52238	0.62885	1.0000
Al	Al3	1.0	0.84990	0.15387	0.62111	1.0000
Si	Si1	1.0	0.32928	0.78673	0.05898	1.0000
Si	Si2	1.0	0.33145	0.53180	0.05344	1.0000
Si	Si3	1.0	0.70808	0.80236	0.05409	1.0000
Si	Si4	1.0	0.70996	0.54563	0.05974	1.0000
Si	Si5	1.0	0.95212	0.80394	0.05367	1.0000
Si	Si6	1.0	0.95490	0.54515	0.05529	1.0000
Si	Si7	1.0	0.53027	0.85821	0.12778	1.0000
Si	Si8	1.0	0.65645	0.19766	0.54447	1.0000
Si	Si9	1.0	0.66588	0.45229	0.55809	1.0000
Si	Si10	1.0	0.28096	0.19953	0.55800	1.0000

Si	Si11	1.0	0.29007	0.45619	0.55719	1.0000
Si	Si12	1.0	0.03946	0.19739	0.54635	1.0000
Si	Si13	1.0	0.04813	0.45609	0.55772	1.0000
Si	Si14	1.0	0.21584	0.34383	0.30942	1.0000
Si	Si15	1.0	0.46575	0.35126	0.30381	1.0000
Si	Si16	1.0	0.20380	0.70963	0.30458	1.0000
Si	Si17	1.0	0.45914	0.71363	0.31004	1.0000
Si	Si18	1.0	0.19966	0.95286	0.30340	1.0000
Si	Si19	1.0	0.45751	0.95719	0.30603	1.0000
Si	Si20	1.0	0.14704	0.53068	0.37994	1.0000
Si	Si21	1.0	0.79550	0.65632	0.80528	1.0000
Si	Si22	1.0	0.54330	0.65290	0.80733	1.0000
Si	Si23	1.0	0.78114	0.28251	0.81829	1.0000
Si	Si24	1.0	0.53156	0.27897	0.80761	1.0000
Si	Si25	1.0	0.78280	0.03312	0.81130	1.0000
Si	Si26	1.0	0.53444	0.03238	0.79951	1.0000
Si	Si27	1.0	0.85054	0.47271	0.88019	1.0000
Si	Si28	1.0	0.65881	0.78724	0.93973	1.0000
Si	Si29	1.0	0.64962	0.53418	0.94674	1.0000
Si	Si30	1.0	0.29050	0.79567	0.94451	1.0000
Si	Si31	1.0	0.28539	0.54098	0.93931	1.0000
Si	Si32	1.0	0.04902	0.80057	0.94726	1.0000
Si	Si33	1.0	0.04371	0.54133	0.94678	1.0000
Si	Si34	1.0	0.46964	0.85123	0.87033	1.0000
Si	Si35	1.0	0.33789	0.20437	0.44562	1.0000
Si	Si36	1.0	0.34188	0.45732	0.44472	1.0000
Si	Si37	1.0	0.71887	0.21845	0.43248	1.0000
Si	Si38	1.0	0.71966	0.47430	0.44540	1.0000
Si	Si39	1.0	0.96286	0.21829	0.43659	1.0000
Si	Si40	1.0	0.96180	0.47339	0.45049	1.0000
Si	Si41	1.0	0.52313	0.15222	0.37096	1.0000
Si	Si42	1.0	0.54439	0.33036	0.69400	1.0000
Si	Si43	1.0	0.79793	0.71182	0.69213	1.0000
Si	Si44	1.0	0.54320	0.70946	0.69435	1.0000

Si	Si45	1.0	0.54317	0.95491	0.69076	1.0000
Si	Si46	1.0	0.21447	0.67249	0.19115	1.0000
Si	Si47	1.0	0.46774	0.67098	0.19652	1.0000
Si	Si48	1.0	0.20246	0.29361	0.19502	1.0000
Si	Si49	1.0	0.45766	0.29180	0.19117	1.0000
Si	Si50	1.0	0.20115	0.04744	0.19598	1.0000
Si	Si51	1.0	0.45818	0.04560	0.19700	1.0000
Si	Si52	1.0	0.14551	0.47130	0.12185	1.0000
Si	Si53	1.0	0.13693	0.86380	0.12424	1.0000
Si	Si54	1.0	0.52426	0.47509	0.12496	1.0000
Si	Si55	1.0	0.47395	0.52363	0.62687	1.0000
Si	Si56	1.0	0.15639	0.14017	0.37354	1.0000
Si	Si57	1.0	0.53768	0.52826	0.37711	1.0000
Si	Si58	1.0	0.86449	0.84217	0.87482	1.0000
Si	Si59	1.0	0.47015	0.45833	0.87441	1.0000
Si	Si60	1.0	0.79840	0.33597	0.70593	1.0000
Si	Si61	1.0	0.79855	0.95496	0.70300	1.0000

T1T2T7T7:

data_image0

_chemical_formula_structural H4O128Al4Si60

_chemical_formula_sum "H4 O128 Al4 Si60"

_cell_length_a 12.5292

_cell_length_b 12.5772

_cell_length_c 26.4616

_cell_angle_alpha 89.8411

_cell_angle_beta 90.1105

_cell_angle_gamma 90.527

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.48380	0.14873	0.53314	1.0000
H	H2	1.0	0.85470	0.51676	0.71576	1.0000
H	H3	1.0	0.56267	0.83210	0.34878	1.0000
H	H4	1.0	0.87268	0.16719	0.86166	1.0000
O	O1	1.0	0.29791	0.65817	0.06335	1.0000
O	O2	1.0	0.34606	0.81306	0.99794	1.0000
O	O3	1.0	0.23649	0.85559	0.08066	1.0000
O	O4	1.0	0.44330	0.80681	0.08523	1.0000

O	O5	1.0	0.34097	0.50430	0.99654	1.0000
O	O6	1.0	0.23084	0.46151	0.07928	1.0000
O	O7	1.0	0.44012	0.50607	0.08284	1.0000
O	O8	1.0	0.70068	0.67394	0.06269	1.0000
O	O9	1.0	0.83452	0.83842	0.05815	1.0000
O	O10	1.0	0.64474	0.86260	0.09756	1.0000
O	O11	1.0	0.83303	0.50790	0.06508	1.0000
O	O12	1.0	0.64419	0.49079	0.10481	1.0000
O	O13	1.0	0.96667	0.67199	0.05716	1.0000
O	O14	1.0	0.02590	0.85545	0.09635	1.0000
O	O15	1.0	0.02640	0.49445	0.10233	1.0000
O	O16	1.0	0.63372	0.33625	0.55039	1.0000
O	O17	1.0	0.68739	0.17329	0.49102	1.0000
O	O18	1.0	0.73937	0.16933	0.58911	1.0000
O	O19	1.0	0.53841	0.14920	0.56045	1.0000
O	O20	1.0	0.68487	0.51072	0.49874	1.0000
O	O21	1.0	0.77216	0.47187	0.58985	1.0000
O	O22	1.0	0.56511	0.52419	0.57872	1.0000
O	O23	1.0	0.28450	0.32871	0.56774	1.0000
O	O24	1.0	0.15409	0.15890	0.55881	1.0000
O	O25	1.0	0.33893	0.14400	0.60741	1.0000
O	O26	1.0	0.17194	0.50056	0.54923	1.0000
O	O27	1.0	0.35592	0.51772	0.59848	1.0000
O	O28	1.0	0.03926	0.33299	0.55340	1.0000
O	O29	1.0	0.95292	0.15718	0.59174	1.0000
O	O30	1.0	0.99941	0.50454	0.60747	1.0000
O	O31	1.0	0.34202	0.37577	0.31076	1.0000
O	O32	1.0	0.17409	0.33683	0.25165	1.0000
O	O33	1.0	0.20595	0.21855	0.33332	1.0000
O	O34	1.0	0.14680	0.42182	0.34159	1.0000
O	O35	1.0	0.49568	0.32803	0.24418	1.0000
O	O36	1.0	0.48590	0.22914	0.33234	1.0000
O	O37	1.0	0.54223	0.43576	0.32583	1.0000
O	O38	1.0	0.32935	0.72260	0.31088	1.0000

O	O39	1.0	0.14837	0.82923	0.31105	1.0000
O	O40	1.0	0.15471	0.63422	0.34680	1.0000
O	O41	1.0	0.49374	0.63085	0.35739	1.0000
O	O42	1.0	0.31884	0.95840	0.31007	1.0000
O	O43	1.0	0.13423	0.02152	0.34857	1.0000
O	O44	1.0	0.51543	0.02745	0.35670	1.0000
O	O45	1.0	0.67515	0.66663	0.81426	1.0000
O	O46	1.0	0.82582	0.65501	0.74111	1.0000
O	O47	1.0	0.85704	0.77194	0.82409	1.0000
O	O48	1.0	0.85333	0.55844	0.82672	1.0000
O	O49	1.0	0.52151	0.64553	0.74581	1.0000
O	O50	1.0	0.49151	0.76457	0.82782	1.0000
O	O51	1.0	0.49935	0.55555	0.83427	1.0000
O	O52	1.0	0.65525	0.28559	0.81191	1.0000
O	O53	1.0	0.82709	0.36389	0.86041	1.0000
O	O54	1.0	0.47842	0.16420	0.80952	1.0000
O	O55	1.0	0.47188	0.35028	0.84856	1.0000
O	O56	1.0	0.64807	0.03932	0.80844	1.0000
O	O57	1.0	0.83495	0.96613	0.86190	1.0000
O	O58	1.0	0.46074	0.97003	0.84093	1.0000
O	O59	1.0	0.61773	0.66617	0.94065	1.0000
O	O60	1.0	0.66309	0.83320	0.99848	1.0000
O	O61	1.0	0.78066	0.79404	0.91739	1.0000
O	O62	1.0	0.57820	0.86085	0.90771	1.0000
O	O63	1.0	0.66298	0.50666	0.00480	1.0000
O	O64	1.0	0.76663	0.52588	0.91831	1.0000
O	O65	1.0	0.56081	0.46728	0.92052	1.0000
O	O66	1.0	0.28863	0.65998	0.93378	1.0000
O	O67	1.0	0.17294	0.83351	0.93967	1.0000
O	O68	1.0	0.36575	0.84068	0.90016	1.0000
O	O69	1.0	0.16338	0.48973	0.94077	1.0000
O	O70	1.0	0.35229	0.47717	0.89794	1.0000
O	O71	1.0	0.04315	0.66386	0.94422	1.0000
O	O72	1.0	0.98361	0.83948	0.89727	1.0000

O	O73	1.0	0.97092	0.48503	0.90312	1.0000
O	O74	1.0	0.30508	0.31894	0.43751	1.0000
O	O75	1.0	0.34133	0.16965	0.50876	1.0000
O	O76	1.0	0.24258	0.12227	0.42122	1.0000
O	O77	1.0	0.45312	0.16736	0.42730	1.0000
O	O78	1.0	0.35575	0.47358	0.50184	1.0000
O	O79	1.0	0.25817	0.51844	0.41444	1.0000
O	O80	1.0	0.45973	0.45959	0.41698	1.0000
O	O81	1.0	0.71160	0.34844	0.43667	1.0000
O	O82	1.0	0.84417	0.18491	0.42369	1.0000
O	O83	1.0	0.64845	0.17181	0.39163	1.0000
O	O84	1.0	0.84476	0.51463	0.43207	1.0000
O	O85	1.0	0.65258	0.53473	0.39932	1.0000
O	O86	1.0	0.97362	0.34801	0.44270	1.0000
O	O87	1.0	0.04426	0.17843	0.39611	1.0000
O	O88	1.0	0.04703	0.53349	0.41269	1.0000
O	O89	1.0	0.67435	0.35972	0.69648	1.0000
O	O90	1.0	0.83387	0.31924	0.76054	1.0000
O	O91	1.0	0.84908	0.25563	0.66448	1.0000
O	O92	1.0	0.49812	0.33288	0.74883	1.0000
O	O93	1.0	0.52746	0.22938	0.66067	1.0000
O	O94	1.0	0.49239	0.43945	0.66462	1.0000
O	O95	1.0	0.66937	0.71572	0.68138	1.0000
O	O96	1.0	0.84111	0.84476	0.69194	1.0000
O	O97	1.0	0.85517	0.66178	0.64290	1.0000
O	O98	1.0	0.49639	0.82889	0.69740	1.0000
O	O99	1.0	0.48029	0.64763	0.64826	1.0000
O	O100	1.0	0.66782	0.95709	0.69968	1.0000
O	O101	1.0	0.83677	0.04193	0.65344	1.0000
O	O102	1.0	0.50209	0.00410	0.64207	1.0000
O	O103	1.0	0.34358	0.68858	0.18857	1.0000
O	O104	1.0	0.17510	0.66278	0.24909	1.0000
O	O105	1.0	0.15617	0.76965	0.16405	1.0000
O	O106	1.0	0.18235	0.55919	0.16431	1.0000

O	O107	1.0	0.49850	0.66516	0.25742	1.0000
O	O108	1.0	0.53814	0.76535	0.17182	1.0000
O	O109	1.0	0.50570	0.55414	0.17505	1.0000
O	O110	1.0	0.32734	0.29620	0.18512	1.0000
O	O111	1.0	0.15940	0.16576	0.19261	1.0000
O	O112	1.0	0.13532	0.35529	0.15388	1.0000
O	O113	1.0	0.49193	0.16079	0.18272	1.0000
O	O114	1.0	0.51141	0.35366	0.14520	1.0000
O	O115	1.0	0.32535	0.03353	0.19418	1.0000
O	O116	1.0	0.14541	0.97947	0.14946	1.0000
O	O117	1.0	0.49746	0.96753	0.14653	1.0000
O	O118	1.0	0.00116	0.83766	0.99713	1.0000
O	O119	1.0	0.99763	0.49788	0.00270	1.0000
O	O120	1.0	0.99369	0.16822	0.49416	1.0000
O	O121	1.0	0.98146	0.50932	0.50758	1.0000
O	O122	1.0	0.15168	0.99351	0.24941	1.0000
O	O123	1.0	0.50134	0.99397	0.24665	1.0000
O	O124	1.0	0.84072	0.01450	0.75233	1.0000
O	O125	1.0	0.48650	0.01265	0.74263	1.0000
O	O126	1.0	0.85864	0.46140	0.68896	1.0000
O	O127	1.0	0.50710	0.82721	0.32299	1.0000
O	O128	1.0	0.82775	0.16958	0.83153	1.0000
Al	Al1	1.0	0.47051	0.13046	0.62449	1.0000
Al	Al2	1.0	0.87145	0.53202	0.62514	1.0000
Al	Al3	1.0	0.45466	0.96517	0.30631	1.0000
Al	Al4	1.0	0.78337	0.03230	0.81053	1.0000
Si	Si1	1.0	0.33108	0.78377	0.05720	1.0000
Si	Si2	1.0	0.32783	0.53280	0.05589	1.0000
Si	Si3	1.0	0.71062	0.80164	0.05384	1.0000
Si	Si4	1.0	0.71032	0.54571	0.05910	1.0000
Si	Si5	1.0	0.95676	0.80011	0.05200	1.0000
Si	Si6	1.0	0.95618	0.54363	0.05669	1.0000
Si	Si7	1.0	0.53007	0.85201	0.12569	1.0000
Si	Si8	1.0	0.65614	0.21093	0.54741	1.0000

Si	Si9	1.0	0.66712	0.46274	0.55559	1.0000
Si	Si10	1.0	0.27737	0.20011	0.56219	1.0000
Si	Si11	1.0	0.29142	0.45459	0.55482	1.0000
Si	Si12	1.0	0.03493	0.20526	0.54995	1.0000
Si	Si13	1.0	0.04815	0.46219	0.55587	1.0000
Si	Si14	1.0	0.21676	0.33749	0.30958	1.0000
Si	Si15	1.0	0.46648	0.34065	0.30330	1.0000
Si	Si16	1.0	0.20009	0.71320	0.30426	1.0000
Si	Si17	1.0	0.19180	0.95173	0.30464	1.0000
Si	Si18	1.0	0.15257	0.52499	0.37867	1.0000
Si	Si19	1.0	0.80190	0.66531	0.80173	1.0000
Si	Si20	1.0	0.54631	0.65890	0.80544	1.0000
Si	Si21	1.0	0.52490	0.28275	0.80377	1.0000
Si	Si22	1.0	0.52194	0.04447	0.79975	1.0000
Si	Si23	1.0	0.85371	0.48614	0.87773	1.0000
Si	Si24	1.0	0.66039	0.78977	0.94059	1.0000
Si	Si25	1.0	0.65188	0.54196	0.94607	1.0000
Si	Si26	1.0	0.29316	0.78694	0.94311	1.0000
Si	Si27	1.0	0.28590	0.53303	0.94255	1.0000
Si	Si28	1.0	0.05011	0.79301	0.94456	1.0000
Si	Si29	1.0	0.04382	0.53551	0.94808	1.0000
Si	Si30	1.0	0.47557	0.85810	0.86936	1.0000
Si	Si31	1.0	0.33471	0.19436	0.44803	1.0000
Si	Si32	1.0	0.34359	0.44294	0.44285	1.0000
Si	Si33	1.0	0.72300	0.22043	0.43564	1.0000
Si	Si34	1.0	0.72333	0.47642	0.44272	1.0000
Si	Si35	1.0	0.96480	0.21989	0.43949	1.0000
Si	Si36	1.0	0.96217	0.47544	0.44930	1.0000
Si	Si37	1.0	0.52502	0.14718	0.37646	1.0000
Si	Si38	1.0	0.54507	0.33698	0.69136	1.0000
Si	Si39	1.0	0.79816	0.72303	0.68783	1.0000
Si	Si40	1.0	0.54240	0.71024	0.69299	1.0000
Si	Si41	1.0	0.79683	0.96555	0.70009	1.0000
Si	Si42	1.0	0.53858	0.95181	0.69429	1.0000

Si	Si43	1.0	0.21442	0.67014	0.19082	1.0000
Si	Si44	1.0	0.47052	0.66831	0.19699	1.0000
Si	Si45	1.0	0.19997	0.28780	0.19609	1.0000
Si	Si46	1.0	0.45596	0.28302	0.18954	1.0000
Si	Si47	1.0	0.19699	0.04297	0.19693	1.0000
Si	Si48	1.0	0.45527	0.03802	0.19397	1.0000
Si	Si49	1.0	0.14353	0.46836	0.12478	1.0000
Si	Si50	1.0	0.14207	0.86440	0.12268	1.0000
Si	Si51	1.0	0.52461	0.47600	0.12697	1.0000
Si	Si52	1.0	0.84483	0.15475	0.62491	1.0000
Si	Si53	1.0	0.47455	0.53122	0.62243	1.0000
Si	Si54	1.0	0.15660	0.13542	0.37491	1.0000
Si	Si55	1.0	0.53636	0.51359	0.37470	1.0000
Si	Si56	1.0	0.86252	0.84549	0.87531	1.0000
Si	Si57	1.0	0.47155	0.46469	0.87558	1.0000
Si	Si58	1.0	0.79997	0.34261	0.70194	1.0000
Si	Si59	1.0	0.45470	0.70412	0.31130	1.0000
Si	Si60	1.0	0.78199	0.29134	0.81507	1.0000

T1T7T7T7:

data_image0

_chemical_formula_structural H4O128Al4Si60

_chemical_formula_sum "H4 O128 Al4 Si60"

_cell_length_a 12.5214

_cell_length_b 12.576

_cell_length_c 26.4428

_cell_angle_alpha 89.4627

_cell_angle_beta 89.7907

_cell_angle_gamma 90.8127

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47743	0.14777	0.53446	1.0000
H	H2	1.0	0.85694	0.51818	0.71456	1.0000
H	H3	1.0	0.52152	0.84307	0.03330	1.0000
H	H4	1.0	0.10696	0.82440	0.35239	1.0000
O	O1	1.0	0.32897	0.67252	0.05766	1.0000
O	O2	1.0	0.33378	0.82652	0.98670	1.0000
O	O3	1.0	0.26100	0.86522	0.08003	1.0000
O	O4	1.0	0.31658	0.49100	0.00627	1.0000

O	O5	1.0	0.25456	0.49377	0.10100	1.0000
O	O6	1.0	0.45951	0.51376	0.07758	1.0000
O	O7	1.0	0.72165	0.65739	0.06197	1.0000
O	O8	1.0	0.85152	0.82526	0.05431	1.0000
O	O9	1.0	0.66702	0.83939	0.10566	1.0000
O	O10	1.0	0.84494	0.48795	0.06379	1.0000
O	O11	1.0	0.65518	0.47378	0.10320	1.0000
O	O12	1.0	0.97749	0.65595	0.05341	1.0000
O	O13	1.0	0.05005	0.83634	0.09010	1.0000
O	O14	1.0	0.04306	0.47484	0.09258	1.0000
O	O15	1.0	0.62768	0.33495	0.55426	1.0000
O	O16	1.0	0.67814	0.17839	0.49150	1.0000
O	O17	1.0	0.73567	0.16360	0.58856	1.0000
O	O18	1.0	0.53305	0.14445	0.56154	1.0000
O	O19	1.0	0.66929	0.51237	0.50116	1.0000
O	O20	1.0	0.77045	0.47192	0.58846	1.0000
O	O21	1.0	0.56328	0.52357	0.58480	1.0000
O	O22	1.0	0.28240	0.33091	0.57036	1.0000
O	O23	1.0	0.15001	0.16659	0.55487	1.0000
O	O24	1.0	0.33048	0.14266	0.60763	1.0000
O	O25	1.0	0.17217	0.50423	0.55132	1.0000
O	O26	1.0	0.35307	0.52028	0.60130	1.0000
O	O27	1.0	0.03259	0.34081	0.55408	1.0000
O	O28	1.0	0.95058	0.15992	0.59152	1.0000
O	O29	1.0	0.99404	0.51787	0.60424	1.0000
O	O30	1.0	0.33257	0.38442	0.30958	1.0000
O	O31	1.0	0.16360	0.32657	0.25357	1.0000
O	O32	1.0	0.20677	0.22210	0.33816	1.0000
O	O33	1.0	0.13609	0.42188	0.34057	1.0000
O	O34	1.0	0.49425	0.34439	0.24628	1.0000
O	O35	1.0	0.47410	0.23874	0.33401	1.0000
O	O36	1.0	0.53181	0.44417	0.33069	1.0000
O	O37	1.0	0.33762	0.73062	0.30367	1.0000
O	O38	1.0	0.18067	0.62776	0.35158	1.0000

O	O39	1.0	0.51434	0.84421	0.31191	1.0000
O	O40	1.0	0.50679	0.65128	0.34975	1.0000
O	O41	1.0	0.34173	0.96925	0.31338	1.0000
O	O42	1.0	0.13809	0.02538	0.35660	1.0000
O	O43	1.0	0.53061	0.03753	0.34453	1.0000
O	O44	1.0	0.67463	0.61961	0.81019	1.0000
O	O45	1.0	0.83030	0.65588	0.74072	1.0000
O	O46	1.0	0.82687	0.76565	0.82615	1.0000
O	O47	1.0	0.86977	0.55573	0.82480	1.0000
O	O48	1.0	0.50743	0.64743	0.75070	1.0000
O	O49	1.0	0.53966	0.77390	0.82989	1.0000
O	O50	1.0	0.47935	0.57255	0.84361	1.0000
O	O51	1.0	0.65488	0.28738	0.80774	1.0000
O	O52	1.0	0.82197	0.16231	0.82478	1.0000
O	O53	1.0	0.82034	0.35898	0.85723	1.0000
O	O54	1.0	0.48586	0.16226	0.81857	1.0000
O	O55	1.0	0.47329	0.36049	0.84428	1.0000
O	O56	1.0	0.65502	0.03292	0.81172	1.0000
O	O57	1.0	0.83219	0.96481	0.85532	1.0000
O	O58	1.0	0.47105	0.96763	0.84915	1.0000
O	O59	1.0	0.63038	0.65957	0.94276	1.0000
O	O60	1.0	0.65996	0.82082	0.00713	1.0000
O	O61	1.0	0.77232	0.81285	0.92126	1.0000
O	O62	1.0	0.56162	0.85310	0.92217	1.0000
O	O63	1.0	0.67669	0.49456	0.00271	1.0000
O	O64	1.0	0.78341	0.52708	0.91640	1.0000
O	O65	1.0	0.58005	0.46303	0.91559	1.0000
O	O66	1.0	0.29351	0.64676	0.94043	1.0000
O	O67	1.0	0.17028	0.81441	0.92270	1.0000
O	O68	1.0	0.36665	0.80781	0.88744	1.0000
O	O69	1.0	0.16686	0.47853	0.93551	1.0000
O	O70	1.0	0.36765	0.46058	0.91103	1.0000
O	O71	1.0	0.03773	0.64868	0.93326	1.0000
O	O72	1.0	0.97268	0.83077	0.89279	1.0000

O	O73	1.0	0.97936	0.46157	0.89671	1.0000
O	O74	1.0	0.34224	0.32096	0.43537	1.0000
O	O75	1.0	0.34637	0.17531	0.51009	1.0000
O	O76	1.0	0.22437	0.14303	0.43061	1.0000
O	O77	1.0	0.43895	0.13829	0.42227	1.0000
O	O78	1.0	0.35662	0.47366	0.50439	1.0000
O	O79	1.0	0.22595	0.49278	0.42596	1.0000
O	O80	1.0	0.43591	0.50678	0.41457	1.0000
O	O81	1.0	0.70224	0.35600	0.43774	1.0000
O	O82	1.0	0.83406	0.19374	0.42378	1.0000
O	O83	1.0	0.63681	0.18179	0.39275	1.0000
O	O84	1.0	0.83370	0.52464	0.43711	1.0000
O	O85	1.0	0.64262	0.54380	0.40224	1.0000
O	O86	1.0	0.96486	0.35790	0.44061	1.0000
O	O87	1.0	0.03270	0.18633	0.39486	1.0000
O	O88	1.0	0.02802	0.54430	0.40448	1.0000
O	O89	1.0	0.66921	0.36239	0.69665	1.0000
O	O90	1.0	0.83415	0.32180	0.75805	1.0000
O	O91	1.0	0.84252	0.26187	0.66136	1.0000
O	O92	1.0	0.49044	0.31493	0.74754	1.0000
O	O93	1.0	0.52442	0.23440	0.65625	1.0000
O	O94	1.0	0.48372	0.44202	0.67028	1.0000
O	O95	1.0	0.66300	0.71788	0.68948	1.0000
O	O96	1.0	0.83503	0.84762	0.69285	1.0000
O	O97	1.0	0.84171	0.66644	0.64155	1.0000
O	O98	1.0	0.49012	0.83104	0.70203	1.0000
O	O99	1.0	0.47628	0.64987	0.65218	1.0000
O	O100	1.0	0.66162	0.96240	0.69989	1.0000
O	O101	1.0	0.83616	0.04857	0.65758	1.0000
O	O102	1.0	0.48813	0.00798	0.64842	1.0000
O	O103	1.0	0.32927	0.62766	0.19613	1.0000
O	O104	1.0	0.16220	0.68032	0.25277	1.0000
O	O105	1.0	0.18490	0.76658	0.16125	1.0000
O	O106	1.0	0.13130	0.56292	0.17371	1.0000

O	O107	1.0	0.50402	0.67555	0.25016	1.0000
O	O108	1.0	0.47064	0.76524	0.15926	1.0000
O	O109	1.0	0.52333	0.56100	0.17063	1.0000
O	O110	1.0	0.32546	0.29416	0.19135	1.0000
O	O111	1.0	0.15782	0.16020	0.19083	1.0000
O	O112	1.0	0.13955	0.35399	0.15554	1.0000
O	O113	1.0	0.49744	0.17223	0.18893	1.0000
O	O114	1.0	0.50194	0.35924	0.14536	1.0000
O	O115	1.0	0.32997	0.03949	0.18980	1.0000
O	O116	1.0	0.15046	0.97385	0.14699	1.0000
O	O117	1.0	0.51261	0.98696	0.14539	1.0000
O	O118	1.0	0.01634	0.81896	0.99154	1.0000
O	O119	1.0	0.99828	0.48613	0.99566	1.0000
O	O120	1.0	0.98424	0.17927	0.49363	1.0000
O	O121	1.0	0.98970	0.51878	0.50373	1.0000
O	O122	1.0	0.16140	0.98363	0.24712	1.0000
O	O123	1.0	0.50075	0.00065	0.24615	1.0000
O	O124	1.0	0.83038	0.01012	0.75600	1.0000
O	O125	1.0	0.48803	0.01258	0.74984	1.0000
O	O126	1.0	0.85497	0.46532	0.68684	1.0000
O	O127	1.0	0.46752	0.84223	0.06099	1.0000
O	O128	1.0	0.15897	0.82587	0.32486	1.0000
Al	Al1	1.0	0.46221	0.13152	0.62504	1.0000
Al	Al2	1.0	0.86561	0.53775	0.62354	1.0000
Al	Al3	1.0	0.53707	0.86176	0.12477	1.0000
Al	Al4	1.0	0.20570	0.96541	0.30781	1.0000
Si	Si1	1.0	0.33952	0.54283	0.06095	1.0000
Si	Si2	1.0	0.72721	0.78641	0.05937	1.0000
Si	Si3	1.0	0.72365	0.52903	0.05792	1.0000
Si	Si4	1.0	0.97327	0.78424	0.04764	1.0000
Si	Si5	1.0	0.96568	0.52751	0.05144	1.0000
Si	Si6	1.0	0.64982	0.20986	0.54903	1.0000
Si	Si7	1.0	0.66066	0.46201	0.55802	1.0000
Si	Si8	1.0	0.27425	0.20322	0.56200	1.0000

Si	Si9	1.0	0.29053	0.45691	0.55722	1.0000
Si	Si10	1.0	0.02991	0.21302	0.54886	1.0000
Si	Si11	1.0	0.04649	0.47029	0.55446	1.0000
Si	Si12	1.0	0.21000	0.33759	0.31040	1.0000
Si	Si13	1.0	0.45855	0.35180	0.30512	1.0000
Si	Si14	1.0	0.46799	0.72563	0.30363	1.0000
Si	Si15	1.0	0.46781	0.96416	0.30330	1.0000
Si	Si16	1.0	0.14364	0.51881	0.38050	1.0000
Si	Si17	1.0	0.79975	0.65156	0.80094	1.0000
Si	Si18	1.0	0.54918	0.65336	0.80842	1.0000
Si	Si19	1.0	0.78269	0.28180	0.81214	1.0000
Si	Si20	1.0	0.52589	0.28158	0.80409	1.0000
Si	Si21	1.0	0.78425	0.04143	0.81143	1.0000
Si	Si22	1.0	0.52611	0.04344	0.80628	1.0000
Si	Si23	1.0	0.86112	0.47578	0.87378	1.0000
Si	Si24	1.0	0.65794	0.78615	0.94758	1.0000
Si	Si25	1.0	0.66797	0.53549	0.94463	1.0000
Si	Si26	1.0	0.29010	0.77403	0.93410	1.0000
Si	Si27	1.0	0.28650	0.51937	0.94824	1.0000
Si	Si28	1.0	0.04808	0.77744	0.93551	1.0000
Si	Si29	1.0	0.04589	0.52045	0.94088	1.0000
Si	Si30	1.0	0.48517	0.84971	0.87211	1.0000
Si	Si31	1.0	0.33699	0.19441	0.44861	1.0000
Si	Si32	1.0	0.34036	0.44839	0.44504	1.0000
Si	Si33	1.0	0.71296	0.22822	0.43624	1.0000
Si	Si34	1.0	0.71169	0.48379	0.44503	1.0000
Si	Si35	1.0	0.95502	0.22944	0.43852	1.0000
Si	Si36	1.0	0.95403	0.48530	0.44732	1.0000
Si	Si37	1.0	0.51874	0.14928	0.37298	1.0000
Si	Si38	1.0	0.54043	0.33566	0.69133	1.0000
Si	Si39	1.0	0.79261	0.72469	0.68928	1.0000
Si	Si40	1.0	0.53465	0.71176	0.69795	1.0000
Si	Si41	1.0	0.79008	0.96720	0.70104	1.0000
Si	Si42	1.0	0.53153	0.95420	0.69879	1.0000

Si	Si43	1.0	0.20422	0.66043	0.19489	1.0000
Si	Si44	1.0	0.45706	0.66036	0.19319	1.0000
Si	Si45	1.0	0.19743	0.28179	0.19810	1.0000
Si	Si46	1.0	0.45469	0.29173	0.19318	1.0000
Si	Si47	1.0	0.20077	0.03835	0.19512	1.0000
Si	Si48	1.0	0.45983	0.04763	0.19196	1.0000
Si	Si49	1.0	0.14253	0.47154	0.13081	1.0000
Si	Si50	1.0	0.16041	0.86000	0.12025	1.0000
Si	Si51	1.0	0.53395	0.47691	0.12508	1.0000
Si	Si52	1.0	0.84154	0.15777	0.62456	1.0000
Si	Si53	1.0	0.46987	0.53276	0.62695	1.0000
Si	Si54	1.0	0.14944	0.14199	0.37973	1.0000
Si	Si55	1.0	0.52883	0.53546	0.37382	1.0000
Si	Si56	1.0	0.85066	0.84352	0.87381	1.0000
Si	Si57	1.0	0.47656	0.46520	0.87848	1.0000
Si	Si58	1.0	0.79581	0.34634	0.70071	1.0000
Si	Si59	1.0	0.34281	0.79851	0.04639	1.0000
Si	Si60	1.0	0.21248	0.70855	0.30702	1.0000

T2T2T7T7:

data_image0

_chemical_formula_structural H4O128Al4Si60

_chemical_formula_sum "H4 O128 Al4 Si60"

_cell_length_a 12.5214

_cell_length_b 12.576

_cell_length_c 26.4428

_cell_angle_alpha 89.4627

_cell_angle_beta 89.7907

_cell_angle_gamma 90.8127

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47743	0.14777	0.53446	1.0000
H	H2	1.0	0.85694	0.51818	0.71456	1.0000
H	H3	1.0	0.52152	0.84307	0.03330	1.0000
H	H4	1.0	0.10696	0.82440	0.35239	1.0000
O	O1	1.0	0.32897	0.67252	0.05766	1.0000
O	O2	1.0	0.33378	0.82652	0.98670	1.0000
O	O3	1.0	0.26100	0.86522	0.08003	1.0000
O	O4	1.0	0.31658	0.49100	0.00627	1.0000

O	O5	1.0	0.25456	0.49377	0.10100	1.0000
O	O6	1.0	0.45951	0.51376	0.07758	1.0000
O	O7	1.0	0.72165	0.65739	0.06197	1.0000
O	O8	1.0	0.85152	0.82526	0.05431	1.0000
O	O9	1.0	0.66702	0.83939	0.10566	1.0000
O	O10	1.0	0.84494	0.48795	0.06379	1.0000
O	O11	1.0	0.65518	0.47378	0.10320	1.0000
O	O12	1.0	0.97749	0.65595	0.05341	1.0000
O	O13	1.0	0.05005	0.83634	0.09010	1.0000
O	O14	1.0	0.04306	0.47484	0.09258	1.0000
O	O15	1.0	0.62768	0.33495	0.55426	1.0000
O	O16	1.0	0.67814	0.17839	0.49150	1.0000
O	O17	1.0	0.73567	0.16360	0.58856	1.0000
O	O18	1.0	0.53305	0.14445	0.56154	1.0000
O	O19	1.0	0.66929	0.51237	0.50116	1.0000
O	O20	1.0	0.77045	0.47192	0.58846	1.0000
O	O21	1.0	0.56328	0.52357	0.58480	1.0000
O	O22	1.0	0.28240	0.33091	0.57036	1.0000
O	O23	1.0	0.15001	0.16659	0.55487	1.0000
O	O24	1.0	0.33048	0.14266	0.60763	1.0000
O	O25	1.0	0.17217	0.50423	0.55132	1.0000
O	O26	1.0	0.35307	0.52028	0.60130	1.0000
O	O27	1.0	0.03259	0.34081	0.55408	1.0000
O	O28	1.0	0.95058	0.15992	0.59152	1.0000
O	O29	1.0	0.99404	0.51787	0.60424	1.0000
O	O30	1.0	0.33257	0.38442	0.30958	1.0000
O	O31	1.0	0.16360	0.32657	0.25357	1.0000
O	O32	1.0	0.20677	0.22210	0.33816	1.0000
O	O33	1.0	0.13609	0.42188	0.34057	1.0000
O	O34	1.0	0.49425	0.34439	0.24628	1.0000
O	O35	1.0	0.47410	0.23874	0.33401	1.0000
O	O36	1.0	0.53181	0.44417	0.33069	1.0000
O	O37	1.0	0.33762	0.73062	0.30367	1.0000
O	O38	1.0	0.18067	0.62776	0.35158	1.0000

O	O39	1.0	0.51434	0.84421	0.31191	1.0000
O	O40	1.0	0.50679	0.65128	0.34975	1.0000
O	O41	1.0	0.34173	0.96925	0.31338	1.0000
O	O42	1.0	0.13809	0.02538	0.35660	1.0000
O	O43	1.0	0.53061	0.03753	0.34453	1.0000
O	O44	1.0	0.67463	0.61961	0.81019	1.0000
O	O45	1.0	0.83030	0.65588	0.74072	1.0000
O	O46	1.0	0.82687	0.76565	0.82615	1.0000
O	O47	1.0	0.86977	0.55573	0.82480	1.0000
O	O48	1.0	0.50743	0.64743	0.75070	1.0000
O	O49	1.0	0.53966	0.77390	0.82989	1.0000
O	O50	1.0	0.47935	0.57255	0.84361	1.0000
O	O51	1.0	0.65488	0.28738	0.80774	1.0000
O	O52	1.0	0.82197	0.16231	0.82478	1.0000
O	O53	1.0	0.82034	0.35898	0.85723	1.0000
O	O54	1.0	0.48586	0.16226	0.81857	1.0000
O	O55	1.0	0.47329	0.36049	0.84428	1.0000
O	O56	1.0	0.65502	0.03292	0.81172	1.0000
O	O57	1.0	0.83219	0.96481	0.85532	1.0000
O	O58	1.0	0.47105	0.96763	0.84915	1.0000
O	O59	1.0	0.63038	0.65957	0.94276	1.0000
O	O60	1.0	0.65996	0.82082	0.00713	1.0000
O	O61	1.0	0.77232	0.81285	0.92126	1.0000
O	O62	1.0	0.56162	0.85310	0.92217	1.0000
O	O63	1.0	0.67669	0.49456	0.00271	1.0000
O	O64	1.0	0.78341	0.52708	0.91640	1.0000
O	O65	1.0	0.58005	0.46303	0.91559	1.0000
O	O66	1.0	0.29351	0.64676	0.94043	1.0000
O	O67	1.0	0.17028	0.81441	0.92270	1.0000
O	O68	1.0	0.36665	0.80781	0.88744	1.0000
O	O69	1.0	0.16686	0.47853	0.93551	1.0000
O	O70	1.0	0.36765	0.46058	0.91103	1.0000
O	O71	1.0	0.03773	0.64868	0.93326	1.0000
O	O72	1.0	0.97268	0.83077	0.89279	1.0000

O	O73	1.0	0.97936	0.46157	0.89671	1.0000
O	O74	1.0	0.34224	0.32096	0.43537	1.0000
O	O75	1.0	0.34637	0.17531	0.51009	1.0000
O	O76	1.0	0.22437	0.14303	0.43061	1.0000
O	O77	1.0	0.43895	0.13829	0.42227	1.0000
O	O78	1.0	0.35662	0.47366	0.50439	1.0000
O	O79	1.0	0.22595	0.49278	0.42596	1.0000
O	O80	1.0	0.43591	0.50678	0.41457	1.0000
O	O81	1.0	0.70224	0.35600	0.43774	1.0000
O	O82	1.0	0.83406	0.19374	0.42378	1.0000
O	O83	1.0	0.63681	0.18179	0.39275	1.0000
O	O84	1.0	0.83370	0.52464	0.43711	1.0000
O	O85	1.0	0.64262	0.54380	0.40224	1.0000
O	O86	1.0	0.96486	0.35790	0.44061	1.0000
O	O87	1.0	0.03270	0.18633	0.39486	1.0000
O	O88	1.0	0.02802	0.54430	0.40448	1.0000
O	O89	1.0	0.66921	0.36239	0.69665	1.0000
O	O90	1.0	0.83415	0.32180	0.75805	1.0000
O	O91	1.0	0.84252	0.26187	0.66136	1.0000
O	O92	1.0	0.49044	0.31493	0.74754	1.0000
O	O93	1.0	0.52442	0.23440	0.65625	1.0000
O	O94	1.0	0.48372	0.44202	0.67028	1.0000
O	O95	1.0	0.66300	0.71788	0.68948	1.0000
O	O96	1.0	0.83503	0.84762	0.69285	1.0000
O	O97	1.0	0.84171	0.66644	0.64155	1.0000
O	O98	1.0	0.49012	0.83104	0.70203	1.0000
O	O99	1.0	0.47628	0.64987	0.65218	1.0000
O	O100	1.0	0.66162	0.96240	0.69989	1.0000
O	O101	1.0	0.83616	0.04857	0.65758	1.0000
O	O102	1.0	0.48813	0.00798	0.64842	1.0000
O	O103	1.0	0.32927	0.62766	0.19613	1.0000
O	O104	1.0	0.16220	0.68032	0.25277	1.0000
O	O105	1.0	0.18490	0.76658	0.16125	1.0000
O	O106	1.0	0.13130	0.56292	0.17371	1.0000

O	O107	1.0	0.50402	0.67555	0.25016	1.0000
O	O108	1.0	0.47064	0.76524	0.15926	1.0000
O	O109	1.0	0.52333	0.56100	0.17063	1.0000
O	O110	1.0	0.32546	0.29416	0.19135	1.0000
O	O111	1.0	0.15782	0.16020	0.19083	1.0000
O	O112	1.0	0.13955	0.35399	0.15554	1.0000
O	O113	1.0	0.49744	0.17223	0.18893	1.0000
O	O114	1.0	0.50194	0.35924	0.14536	1.0000
O	O115	1.0	0.32997	0.03949	0.18980	1.0000
O	O116	1.0	0.15046	0.97385	0.14699	1.0000
O	O117	1.0	0.51261	0.98696	0.14539	1.0000
O	O118	1.0	0.01634	0.81896	0.99154	1.0000
O	O119	1.0	0.99828	0.48613	0.99566	1.0000
O	O120	1.0	0.98424	0.17927	0.49363	1.0000
O	O121	1.0	0.98970	0.51878	0.50373	1.0000
O	O122	1.0	0.16140	0.98363	0.24712	1.0000
O	O123	1.0	0.50075	0.00065	0.24615	1.0000
O	O124	1.0	0.83038	0.01012	0.75600	1.0000
O	O125	1.0	0.48803	0.01258	0.74984	1.0000
O	O126	1.0	0.85497	0.46532	0.68684	1.0000
O	O127	1.0	0.46752	0.84223	0.06099	1.0000
O	O128	1.0	0.15897	0.82587	0.32486	1.0000
Al	Al1	1.0	0.46221	0.13152	0.62504	1.0000
Al	Al2	1.0	0.86561	0.53775	0.62354	1.0000
Al	Al3	1.0	0.53707	0.86176	0.12477	1.0000
Al	Al4	1.0	0.20570	0.96541	0.30781	1.0000
Si	Si1	1.0	0.33952	0.54283	0.06095	1.0000
Si	Si2	1.0	0.72721	0.78641	0.05937	1.0000
Si	Si3	1.0	0.72365	0.52903	0.05792	1.0000
Si	Si4	1.0	0.97327	0.78424	0.04764	1.0000
Si	Si5	1.0	0.96568	0.52751	0.05144	1.0000
Si	Si6	1.0	0.64982	0.20986	0.54903	1.0000
Si	Si7	1.0	0.66066	0.46201	0.55802	1.0000
Si	Si8	1.0	0.27425	0.20322	0.56200	1.0000

Si	Si9	1.0	0.29053	0.45691	0.55722	1.0000
Si	Si10	1.0	0.02991	0.21302	0.54886	1.0000
Si	Si11	1.0	0.04649	0.47029	0.55446	1.0000
Si	Si12	1.0	0.21000	0.33759	0.31040	1.0000
Si	Si13	1.0	0.45855	0.35180	0.30512	1.0000
Si	Si14	1.0	0.46799	0.72563	0.30363	1.0000
Si	Si15	1.0	0.46781	0.96416	0.30330	1.0000
Si	Si16	1.0	0.14364	0.51881	0.38050	1.0000
Si	Si17	1.0	0.79975	0.65156	0.80094	1.0000
Si	Si18	1.0	0.54918	0.65336	0.80842	1.0000
Si	Si19	1.0	0.78269	0.28180	0.81214	1.0000
Si	Si20	1.0	0.52589	0.28158	0.80409	1.0000
Si	Si21	1.0	0.78425	0.04143	0.81143	1.0000
Si	Si22	1.0	0.52611	0.04344	0.80628	1.0000
Si	Si23	1.0	0.86112	0.47578	0.87378	1.0000
Si	Si24	1.0	0.65794	0.78615	0.94758	1.0000
Si	Si25	1.0	0.66797	0.53549	0.94463	1.0000
Si	Si26	1.0	0.29010	0.77403	0.93410	1.0000
Si	Si27	1.0	0.28650	0.51937	0.94824	1.0000
Si	Si28	1.0	0.04808	0.77744	0.93551	1.0000
Si	Si29	1.0	0.04589	0.52045	0.94088	1.0000
Si	Si30	1.0	0.48517	0.84971	0.87211	1.0000
Si	Si31	1.0	0.33699	0.19441	0.44861	1.0000
Si	Si32	1.0	0.34036	0.44839	0.44504	1.0000
Si	Si33	1.0	0.71296	0.22822	0.43624	1.0000
Si	Si34	1.0	0.71169	0.48379	0.44503	1.0000
Si	Si35	1.0	0.95502	0.22944	0.43852	1.0000
Si	Si36	1.0	0.95403	0.48530	0.44732	1.0000
Si	Si37	1.0	0.51874	0.14928	0.37298	1.0000
Si	Si38	1.0	0.54043	0.33566	0.69133	1.0000
Si	Si39	1.0	0.79261	0.72469	0.68928	1.0000
Si	Si40	1.0	0.53465	0.71176	0.69795	1.0000
Si	Si41	1.0	0.79008	0.96720	0.70104	1.0000
Si	Si42	1.0	0.53153	0.95420	0.69879	1.0000

Si	Si43	1.0	0.20422	0.66043	0.19489	1.0000
Si	Si44	1.0	0.45706	0.66036	0.19319	1.0000
Si	Si45	1.0	0.19743	0.28179	0.19810	1.0000
Si	Si46	1.0	0.45469	0.29173	0.19318	1.0000
Si	Si47	1.0	0.20077	0.03835	0.19512	1.0000
Si	Si48	1.0	0.45983	0.04763	0.19196	1.0000
Si	Si49	1.0	0.14253	0.47154	0.13081	1.0000
Si	Si50	1.0	0.16041	0.86000	0.12025	1.0000
Si	Si51	1.0	0.53395	0.47691	0.12508	1.0000
Si	Si52	1.0	0.84154	0.15777	0.62456	1.0000
Si	Si53	1.0	0.46987	0.53276	0.62695	1.0000
Si	Si54	1.0	0.14944	0.14199	0.37973	1.0000
Si	Si55	1.0	0.52883	0.53546	0.37382	1.0000
Si	Si56	1.0	0.85066	0.84352	0.87381	1.0000
Si	Si57	1.0	0.47656	0.46520	0.87848	1.0000
Si	Si58	1.0	0.79581	0.34634	0.70071	1.0000
Si	Si59	1.0	0.34281	0.79851	0.04639	1.0000
Si	Si60	1.0	0.21248	0.70855	0.30702	1.0000

T2T7T7T9:

data_image0

_chemical_formula_structural H4O128Al4Si60

_chemical_formula_sum "H4 O128 Al4 Si60"

_cell_length_a 12.5214

_cell_length_b 12.576

_cell_length_c 26.4428

_cell_angle_alpha 89.4627

_cell_angle_beta 89.7907

_cell_angle_gamma 90.8127

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47743	0.14777	0.53446	1.0000
H	H2	1.0	0.85694	0.51818	0.71456	1.0000
H	H3	1.0	0.52152	0.84307	0.03330	1.0000
H	H4	1.0	0.10696	0.82440	0.35239	1.0000
O	O1	1.0	0.32897	0.67252	0.05766	1.0000
O	O2	1.0	0.33378	0.82652	0.98670	1.0000
O	O3	1.0	0.26100	0.86522	0.08003	1.0000
O	O4	1.0	0.31658	0.49100	0.00627	1.0000

O	O5	1.0	0.25456	0.49377	0.10100	1.0000
O	O6	1.0	0.45951	0.51376	0.07758	1.0000
O	O7	1.0	0.72165	0.65739	0.06197	1.0000
O	O8	1.0	0.85152	0.82526	0.05431	1.0000
O	O9	1.0	0.66702	0.83939	0.10566	1.0000
O	O10	1.0	0.84494	0.48795	0.06379	1.0000
O	O11	1.0	0.65518	0.47378	0.10320	1.0000
O	O12	1.0	0.97749	0.65595	0.05341	1.0000
O	O13	1.0	0.05005	0.83634	0.09010	1.0000
O	O14	1.0	0.04306	0.47484	0.09258	1.0000
O	O15	1.0	0.62768	0.33495	0.55426	1.0000
O	O16	1.0	0.67814	0.17839	0.49150	1.0000
O	O17	1.0	0.73567	0.16360	0.58856	1.0000
O	O18	1.0	0.53305	0.14445	0.56154	1.0000
O	O19	1.0	0.66929	0.51237	0.50116	1.0000
O	O20	1.0	0.77045	0.47192	0.58846	1.0000
O	O21	1.0	0.56328	0.52357	0.58480	1.0000
O	O22	1.0	0.28240	0.33091	0.57036	1.0000
O	O23	1.0	0.15001	0.16659	0.55487	1.0000
O	O24	1.0	0.33048	0.14266	0.60763	1.0000
O	O25	1.0	0.17217	0.50423	0.55132	1.0000
O	O26	1.0	0.35307	0.52028	0.60130	1.0000
O	O27	1.0	0.03259	0.34081	0.55408	1.0000
O	O28	1.0	0.95058	0.15992	0.59152	1.0000
O	O29	1.0	0.99404	0.51787	0.60424	1.0000
O	O30	1.0	0.33257	0.38442	0.30958	1.0000
O	O31	1.0	0.16360	0.32657	0.25357	1.0000
O	O32	1.0	0.20677	0.22210	0.33816	1.0000
O	O33	1.0	0.13609	0.42188	0.34057	1.0000
O	O34	1.0	0.49425	0.34439	0.24628	1.0000
O	O35	1.0	0.47410	0.23874	0.33401	1.0000
O	O36	1.0	0.53181	0.44417	0.33069	1.0000
O	O37	1.0	0.33762	0.73062	0.30367	1.0000
O	O38	1.0	0.18067	0.62776	0.35158	1.0000

O	O39	1.0	0.51434	0.84421	0.31191	1.0000
O	O40	1.0	0.50679	0.65128	0.34975	1.0000
O	O41	1.0	0.34173	0.96925	0.31338	1.0000
O	O42	1.0	0.13809	0.02538	0.35660	1.0000
O	O43	1.0	0.53061	0.03753	0.34453	1.0000
O	O44	1.0	0.67463	0.61961	0.81019	1.0000
O	O45	1.0	0.83030	0.65588	0.74072	1.0000
O	O46	1.0	0.82687	0.76565	0.82615	1.0000
O	O47	1.0	0.86977	0.55573	0.82480	1.0000
O	O48	1.0	0.50743	0.64743	0.75070	1.0000
O	O49	1.0	0.53966	0.77390	0.82989	1.0000
O	O50	1.0	0.47935	0.57255	0.84361	1.0000
O	O51	1.0	0.65488	0.28738	0.80774	1.0000
O	O52	1.0	0.82197	0.16231	0.82478	1.0000
O	O53	1.0	0.82034	0.35898	0.85723	1.0000
O	O54	1.0	0.48586	0.16226	0.81857	1.0000
O	O55	1.0	0.47329	0.36049	0.84428	1.0000
O	O56	1.0	0.65502	0.03292	0.81172	1.0000
O	O57	1.0	0.83219	0.96481	0.85532	1.0000
O	O58	1.0	0.47105	0.96763	0.84915	1.0000
O	O59	1.0	0.63038	0.65957	0.94276	1.0000
O	O60	1.0	0.65996	0.82082	0.00713	1.0000
O	O61	1.0	0.77232	0.81285	0.92126	1.0000
O	O62	1.0	0.56162	0.85310	0.92217	1.0000
O	O63	1.0	0.67669	0.49456	0.00271	1.0000
O	O64	1.0	0.78341	0.52708	0.91640	1.0000
O	O65	1.0	0.58005	0.46303	0.91559	1.0000
O	O66	1.0	0.29351	0.64676	0.94043	1.0000
O	O67	1.0	0.17028	0.81441	0.92270	1.0000
O	O68	1.0	0.36665	0.80781	0.88744	1.0000
O	O69	1.0	0.16686	0.47853	0.93551	1.0000
O	O70	1.0	0.36765	0.46058	0.91103	1.0000
O	O71	1.0	0.03773	0.64868	0.93326	1.0000
O	O72	1.0	0.97268	0.83077	0.89279	1.0000

O	O73	1.0	0.97936	0.46157	0.89671	1.0000
O	O74	1.0	0.34224	0.32096	0.43537	1.0000
O	O75	1.0	0.34637	0.17531	0.51009	1.0000
O	O76	1.0	0.22437	0.14303	0.43061	1.0000
O	O77	1.0	0.43895	0.13829	0.42227	1.0000
O	O78	1.0	0.35662	0.47366	0.50439	1.0000
O	O79	1.0	0.22595	0.49278	0.42596	1.0000
O	O80	1.0	0.43591	0.50678	0.41457	1.0000
O	O81	1.0	0.70224	0.35600	0.43774	1.0000
O	O82	1.0	0.83406	0.19374	0.42378	1.0000
O	O83	1.0	0.63681	0.18179	0.39275	1.0000
O	O84	1.0	0.83370	0.52464	0.43711	1.0000
O	O85	1.0	0.64262	0.54380	0.40224	1.0000
O	O86	1.0	0.96486	0.35790	0.44061	1.0000
O	O87	1.0	0.03270	0.18633	0.39486	1.0000
O	O88	1.0	0.02802	0.54430	0.40448	1.0000
O	O89	1.0	0.66921	0.36239	0.69665	1.0000
O	O90	1.0	0.83415	0.32180	0.75805	1.0000
O	O91	1.0	0.84252	0.26187	0.66136	1.0000
O	O92	1.0	0.49044	0.31493	0.74754	1.0000
O	O93	1.0	0.52442	0.23440	0.65625	1.0000
O	O94	1.0	0.48372	0.44202	0.67028	1.0000
O	O95	1.0	0.66300	0.71788	0.68948	1.0000
O	O96	1.0	0.83503	0.84762	0.69285	1.0000
O	O97	1.0	0.84171	0.66644	0.64155	1.0000
O	O98	1.0	0.49012	0.83104	0.70203	1.0000
O	O99	1.0	0.47628	0.64987	0.65218	1.0000
O	O100	1.0	0.66162	0.96240	0.69989	1.0000
O	O101	1.0	0.83616	0.04857	0.65758	1.0000
O	O102	1.0	0.48813	0.00798	0.64842	1.0000
O	O103	1.0	0.32927	0.62766	0.19613	1.0000
O	O104	1.0	0.16220	0.68032	0.25277	1.0000
O	O105	1.0	0.18490	0.76658	0.16125	1.0000
O	O106	1.0	0.13130	0.56292	0.17371	1.0000

O	O107	1.0	0.50402	0.67555	0.25016	1.0000
O	O108	1.0	0.47064	0.76524	0.15926	1.0000
O	O109	1.0	0.52333	0.56100	0.17063	1.0000
O	O110	1.0	0.32546	0.29416	0.19135	1.0000
O	O111	1.0	0.15782	0.16020	0.19083	1.0000
O	O112	1.0	0.13955	0.35399	0.15554	1.0000
O	O113	1.0	0.49744	0.17223	0.18893	1.0000
O	O114	1.0	0.50194	0.35924	0.14536	1.0000
O	O115	1.0	0.32997	0.03949	0.18980	1.0000
O	O116	1.0	0.15046	0.97385	0.14699	1.0000
O	O117	1.0	0.51261	0.98696	0.14539	1.0000
O	O118	1.0	0.01634	0.81896	0.99154	1.0000
O	O119	1.0	0.99828	0.48613	0.99566	1.0000
O	O120	1.0	0.98424	0.17927	0.49363	1.0000
O	O121	1.0	0.98970	0.51878	0.50373	1.0000
O	O122	1.0	0.16140	0.98363	0.24712	1.0000
O	O123	1.0	0.50075	0.00065	0.24615	1.0000
O	O124	1.0	0.83038	0.01012	0.75600	1.0000
O	O125	1.0	0.48803	0.01258	0.74984	1.0000
O	O126	1.0	0.85497	0.46532	0.68684	1.0000
O	O127	1.0	0.46752	0.84223	0.06099	1.0000
O	O128	1.0	0.15897	0.82587	0.32486	1.0000
Al	Al1	1.0	0.46221	0.13152	0.62504	1.0000
Al	Al2	1.0	0.86561	0.53775	0.62354	1.0000
Al	Al3	1.0	0.53707	0.86176	0.12477	1.0000
Al	Al4	1.0	0.20570	0.96541	0.30781	1.0000
Si	Si1	1.0	0.33952	0.54283	0.06095	1.0000
Si	Si2	1.0	0.72721	0.78641	0.05937	1.0000
Si	Si3	1.0	0.72365	0.52903	0.05792	1.0000
Si	Si4	1.0	0.97327	0.78424	0.04764	1.0000
Si	Si5	1.0	0.96568	0.52751	0.05144	1.0000
Si	Si6	1.0	0.64982	0.20986	0.54903	1.0000
Si	Si7	1.0	0.66066	0.46201	0.55802	1.0000
Si	Si8	1.0	0.27425	0.20322	0.56200	1.0000

Si	Si9	1.0	0.29053	0.45691	0.55722	1.0000
Si	Si10	1.0	0.02991	0.21302	0.54886	1.0000
Si	Si11	1.0	0.04649	0.47029	0.55446	1.0000
Si	Si12	1.0	0.21000	0.33759	0.31040	1.0000
Si	Si13	1.0	0.45855	0.35180	0.30512	1.0000
Si	Si14	1.0	0.46799	0.72563	0.30363	1.0000
Si	Si15	1.0	0.46781	0.96416	0.30330	1.0000
Si	Si16	1.0	0.14364	0.51881	0.38050	1.0000
Si	Si17	1.0	0.79975	0.65156	0.80094	1.0000
Si	Si18	1.0	0.54918	0.65336	0.80842	1.0000
Si	Si19	1.0	0.78269	0.28180	0.81214	1.0000
Si	Si20	1.0	0.52589	0.28158	0.80409	1.0000
Si	Si21	1.0	0.78425	0.04143	0.81143	1.0000
Si	Si22	1.0	0.52611	0.04344	0.80628	1.0000
Si	Si23	1.0	0.86112	0.47578	0.87378	1.0000
Si	Si24	1.0	0.65794	0.78615	0.94758	1.0000
Si	Si25	1.0	0.66797	0.53549	0.94463	1.0000
Si	Si26	1.0	0.29010	0.77403	0.93410	1.0000
Si	Si27	1.0	0.28650	0.51937	0.94824	1.0000
Si	Si28	1.0	0.04808	0.77744	0.93551	1.0000
Si	Si29	1.0	0.04589	0.52045	0.94088	1.0000
Si	Si30	1.0	0.48517	0.84971	0.87211	1.0000
Si	Si31	1.0	0.33699	0.19441	0.44861	1.0000
Si	Si32	1.0	0.34036	0.44839	0.44504	1.0000
Si	Si33	1.0	0.71296	0.22822	0.43624	1.0000
Si	Si34	1.0	0.71169	0.48379	0.44503	1.0000
Si	Si35	1.0	0.95502	0.22944	0.43852	1.0000
Si	Si36	1.0	0.95403	0.48530	0.44732	1.0000
Si	Si37	1.0	0.51874	0.14928	0.37298	1.0000
Si	Si38	1.0	0.54043	0.33566	0.69133	1.0000
Si	Si39	1.0	0.79261	0.72469	0.68928	1.0000
Si	Si40	1.0	0.53465	0.71176	0.69795	1.0000
Si	Si41	1.0	0.79008	0.96720	0.70104	1.0000
Si	Si42	1.0	0.53153	0.95420	0.69879	1.0000

Si	Si43	1.0	0.20422	0.66043	0.19489	1.0000
Si	Si44	1.0	0.45706	0.66036	0.19319	1.0000
Si	Si45	1.0	0.19743	0.28179	0.19810	1.0000
Si	Si46	1.0	0.45469	0.29173	0.19318	1.0000
Si	Si47	1.0	0.20077	0.03835	0.19512	1.0000
Si	Si48	1.0	0.45983	0.04763	0.19196	1.0000
Si	Si49	1.0	0.14253	0.47154	0.13081	1.0000
Si	Si50	1.0	0.16041	0.86000	0.12025	1.0000
Si	Si51	1.0	0.53395	0.47691	0.12508	1.0000
Si	Si52	1.0	0.84154	0.15777	0.62456	1.0000
Si	Si53	1.0	0.46987	0.53276	0.62695	1.0000
Si	Si54	1.0	0.14944	0.14199	0.37973	1.0000
Si	Si55	1.0	0.52883	0.53546	0.37382	1.0000
Si	Si56	1.0	0.85066	0.84352	0.87381	1.0000
Si	Si57	1.0	0.47656	0.46520	0.87848	1.0000
Si	Si58	1.0	0.79581	0.34634	0.70071	1.0000
Si	Si59	1.0	0.34281	0.79851	0.04639	1.0000
Si	Si60	1.0	0.21248	0.70855	0.30702	1.0000

T7T7T7T7:

data_image0

_chemical_formula_structural H4O128Al4Si60

_chemical_formula_sum "H4 O128 Al4 Si60"

_cell_length_a 12.5214

_cell_length_b 12.576

_cell_length_c 26.4428

_cell_angle_alpha 89.4627

_cell_angle_beta 89.7907

_cell_angle_gamma 90.8127

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47743	0.14777	0.53446	1.0000
H	H2	1.0	0.85694	0.51818	0.71456	1.0000
H	H3	1.0	0.52152	0.84307	0.03330	1.0000
H	H4	1.0	0.10696	0.82440	0.35239	1.0000
O	O1	1.0	0.32897	0.67252	0.05766	1.0000
O	O2	1.0	0.33378	0.82652	0.98670	1.0000
O	O3	1.0	0.26100	0.86522	0.08003	1.0000
O	O4	1.0	0.31658	0.49100	0.00627	1.0000

O	O5	1.0	0.25456	0.49377	0.10100	1.0000
O	O6	1.0	0.45951	0.51376	0.07758	1.0000
O	O7	1.0	0.72165	0.65739	0.06197	1.0000
O	O8	1.0	0.85152	0.82526	0.05431	1.0000
O	O9	1.0	0.66702	0.83939	0.10566	1.0000
O	O10	1.0	0.84494	0.48795	0.06379	1.0000
O	O11	1.0	0.65518	0.47378	0.10320	1.0000
O	O12	1.0	0.97749	0.65595	0.05341	1.0000
O	O13	1.0	0.05005	0.83634	0.09010	1.0000
O	O14	1.0	0.04306	0.47484	0.09258	1.0000
O	O15	1.0	0.62768	0.33495	0.55426	1.0000
O	O16	1.0	0.67814	0.17839	0.49150	1.0000
O	O17	1.0	0.73567	0.16360	0.58856	1.0000
O	O18	1.0	0.53305	0.14445	0.56154	1.0000
O	O19	1.0	0.66929	0.51237	0.50116	1.0000
O	O20	1.0	0.77045	0.47192	0.58846	1.0000
O	O21	1.0	0.56328	0.52357	0.58480	1.0000
O	O22	1.0	0.28240	0.33091	0.57036	1.0000
O	O23	1.0	0.15001	0.16659	0.55487	1.0000
O	O24	1.0	0.33048	0.14266	0.60763	1.0000
O	O25	1.0	0.17217	0.50423	0.55132	1.0000
O	O26	1.0	0.35307	0.52028	0.60130	1.0000
O	O27	1.0	0.03259	0.34081	0.55408	1.0000
O	O28	1.0	0.95058	0.15992	0.59152	1.0000
O	O29	1.0	0.99404	0.51787	0.60424	1.0000
O	O30	1.0	0.33257	0.38442	0.30958	1.0000
O	O31	1.0	0.16360	0.32657	0.25357	1.0000
O	O32	1.0	0.20677	0.22210	0.33816	1.0000
O	O33	1.0	0.13609	0.42188	0.34057	1.0000
O	O34	1.0	0.49425	0.34439	0.24628	1.0000
O	O35	1.0	0.47410	0.23874	0.33401	1.0000
O	O36	1.0	0.53181	0.44417	0.33069	1.0000
O	O37	1.0	0.33762	0.73062	0.30367	1.0000
O	O38	1.0	0.18067	0.62776	0.35158	1.0000

O	O39	1.0	0.51434	0.84421	0.31191	1.0000
O	O40	1.0	0.50679	0.65128	0.34975	1.0000
O	O41	1.0	0.34173	0.96925	0.31338	1.0000
O	O42	1.0	0.13809	0.02538	0.35660	1.0000
O	O43	1.0	0.53061	0.03753	0.34453	1.0000
O	O44	1.0	0.67463	0.61961	0.81019	1.0000
O	O45	1.0	0.83030	0.65588	0.74072	1.0000
O	O46	1.0	0.82687	0.76565	0.82615	1.0000
O	O47	1.0	0.86977	0.55573	0.82480	1.0000
O	O48	1.0	0.50743	0.64743	0.75070	1.0000
O	O49	1.0	0.53966	0.77390	0.82989	1.0000
O	O50	1.0	0.47935	0.57255	0.84361	1.0000
O	O51	1.0	0.65488	0.28738	0.80774	1.0000
O	O52	1.0	0.82197	0.16231	0.82478	1.0000
O	O53	1.0	0.82034	0.35898	0.85723	1.0000
O	O54	1.0	0.48586	0.16226	0.81857	1.0000
O	O55	1.0	0.47329	0.36049	0.84428	1.0000
O	O56	1.0	0.65502	0.03292	0.81172	1.0000
O	O57	1.0	0.83219	0.96481	0.85532	1.0000
O	O58	1.0	0.47105	0.96763	0.84915	1.0000
O	O59	1.0	0.63038	0.65957	0.94276	1.0000
O	O60	1.0	0.65996	0.82082	0.00713	1.0000
O	O61	1.0	0.77232	0.81285	0.92126	1.0000
O	O62	1.0	0.56162	0.85310	0.92217	1.0000
O	O63	1.0	0.67669	0.49456	0.00271	1.0000
O	O64	1.0	0.78341	0.52708	0.91640	1.0000
O	O65	1.0	0.58005	0.46303	0.91559	1.0000
O	O66	1.0	0.29351	0.64676	0.94043	1.0000
O	O67	1.0	0.17028	0.81441	0.92270	1.0000
O	O68	1.0	0.36665	0.80781	0.88744	1.0000
O	O69	1.0	0.16686	0.47853	0.93551	1.0000
O	O70	1.0	0.36765	0.46058	0.91103	1.0000
O	O71	1.0	0.03773	0.64868	0.93326	1.0000
O	O72	1.0	0.97268	0.83077	0.89279	1.0000

O	O73	1.0	0.97936	0.46157	0.89671	1.0000
O	O74	1.0	0.34224	0.32096	0.43537	1.0000
O	O75	1.0	0.34637	0.17531	0.51009	1.0000
O	O76	1.0	0.22437	0.14303	0.43061	1.0000
O	O77	1.0	0.43895	0.13829	0.42227	1.0000
O	O78	1.0	0.35662	0.47366	0.50439	1.0000
O	O79	1.0	0.22595	0.49278	0.42596	1.0000
O	O80	1.0	0.43591	0.50678	0.41457	1.0000
O	O81	1.0	0.70224	0.35600	0.43774	1.0000
O	O82	1.0	0.83406	0.19374	0.42378	1.0000
O	O83	1.0	0.63681	0.18179	0.39275	1.0000
O	O84	1.0	0.83370	0.52464	0.43711	1.0000
O	O85	1.0	0.64262	0.54380	0.40224	1.0000
O	O86	1.0	0.96486	0.35790	0.44061	1.0000
O	O87	1.0	0.03270	0.18633	0.39486	1.0000
O	O88	1.0	0.02802	0.54430	0.40448	1.0000
O	O89	1.0	0.66921	0.36239	0.69665	1.0000
O	O90	1.0	0.83415	0.32180	0.75805	1.0000
O	O91	1.0	0.84252	0.26187	0.66136	1.0000
O	O92	1.0	0.49044	0.31493	0.74754	1.0000
O	O93	1.0	0.52442	0.23440	0.65625	1.0000
O	O94	1.0	0.48372	0.44202	0.67028	1.0000
O	O95	1.0	0.66300	0.71788	0.68948	1.0000
O	O96	1.0	0.83503	0.84762	0.69285	1.0000
O	O97	1.0	0.84171	0.66644	0.64155	1.0000
O	O98	1.0	0.49012	0.83104	0.70203	1.0000
O	O99	1.0	0.47628	0.64987	0.65218	1.0000
O	O100	1.0	0.66162	0.96240	0.69989	1.0000
O	O101	1.0	0.83616	0.04857	0.65758	1.0000
O	O102	1.0	0.48813	0.00798	0.64842	1.0000
O	O103	1.0	0.32927	0.62766	0.19613	1.0000
O	O104	1.0	0.16220	0.68032	0.25277	1.0000
O	O105	1.0	0.18490	0.76658	0.16125	1.0000
O	O106	1.0	0.13130	0.56292	0.17371	1.0000

O	O107	1.0	0.50402	0.67555	0.25016	1.0000
O	O108	1.0	0.47064	0.76524	0.15926	1.0000
O	O109	1.0	0.52333	0.56100	0.17063	1.0000
O	O110	1.0	0.32546	0.29416	0.19135	1.0000
O	O111	1.0	0.15782	0.16020	0.19083	1.0000
O	O112	1.0	0.13955	0.35399	0.15554	1.0000
O	O113	1.0	0.49744	0.17223	0.18893	1.0000
O	O114	1.0	0.50194	0.35924	0.14536	1.0000
O	O115	1.0	0.32997	0.03949	0.18980	1.0000
O	O116	1.0	0.15046	0.97385	0.14699	1.0000
O	O117	1.0	0.51261	0.98696	0.14539	1.0000
O	O118	1.0	0.01634	0.81896	0.99154	1.0000
O	O119	1.0	0.99828	0.48613	0.99566	1.0000
O	O120	1.0	0.98424	0.17927	0.49363	1.0000
O	O121	1.0	0.98970	0.51878	0.50373	1.0000
O	O122	1.0	0.16140	0.98363	0.24712	1.0000
O	O123	1.0	0.50075	0.00065	0.24615	1.0000
O	O124	1.0	0.83038	0.01012	0.75600	1.0000
O	O125	1.0	0.48803	0.01258	0.74984	1.0000
O	O126	1.0	0.85497	0.46532	0.68684	1.0000
O	O127	1.0	0.46752	0.84223	0.06099	1.0000
O	O128	1.0	0.15897	0.82587	0.32486	1.0000
Al	Al1	1.0	0.46221	0.13152	0.62504	1.0000
Al	Al2	1.0	0.86561	0.53775	0.62354	1.0000
Al	Al3	1.0	0.53707	0.86176	0.12477	1.0000
Al	Al4	1.0	0.20570	0.96541	0.30781	1.0000
Si	Si1	1.0	0.33952	0.54283	0.06095	1.0000
Si	Si2	1.0	0.72721	0.78641	0.05937	1.0000
Si	Si3	1.0	0.72365	0.52903	0.05792	1.0000
Si	Si4	1.0	0.97327	0.78424	0.04764	1.0000
Si	Si5	1.0	0.96568	0.52751	0.05144	1.0000
Si	Si6	1.0	0.64982	0.20986	0.54903	1.0000
Si	Si7	1.0	0.66066	0.46201	0.55802	1.0000
Si	Si8	1.0	0.27425	0.20322	0.56200	1.0000

Si	Si9	1.0	0.29053	0.45691	0.55722	1.0000
Si	Si10	1.0	0.02991	0.21302	0.54886	1.0000
Si	Si11	1.0	0.04649	0.47029	0.55446	1.0000
Si	Si12	1.0	0.21000	0.33759	0.31040	1.0000
Si	Si13	1.0	0.45855	0.35180	0.30512	1.0000
Si	Si14	1.0	0.46799	0.72563	0.30363	1.0000
Si	Si15	1.0	0.46781	0.96416	0.30330	1.0000
Si	Si16	1.0	0.14364	0.51881	0.38050	1.0000
Si	Si17	1.0	0.79975	0.65156	0.80094	1.0000
Si	Si18	1.0	0.54918	0.65336	0.80842	1.0000
Si	Si19	1.0	0.78269	0.28180	0.81214	1.0000
Si	Si20	1.0	0.52589	0.28158	0.80409	1.0000
Si	Si21	1.0	0.78425	0.04143	0.81143	1.0000
Si	Si22	1.0	0.52611	0.04344	0.80628	1.0000
Si	Si23	1.0	0.86112	0.47578	0.87378	1.0000
Si	Si24	1.0	0.65794	0.78615	0.94758	1.0000
Si	Si25	1.0	0.66797	0.53549	0.94463	1.0000
Si	Si26	1.0	0.29010	0.77403	0.93410	1.0000
Si	Si27	1.0	0.28650	0.51937	0.94824	1.0000
Si	Si28	1.0	0.04808	0.77744	0.93551	1.0000
Si	Si29	1.0	0.04589	0.52045	0.94088	1.0000
Si	Si30	1.0	0.48517	0.84971	0.87211	1.0000
Si	Si31	1.0	0.33699	0.19441	0.44861	1.0000
Si	Si32	1.0	0.34036	0.44839	0.44504	1.0000
Si	Si33	1.0	0.71296	0.22822	0.43624	1.0000
Si	Si34	1.0	0.71169	0.48379	0.44503	1.0000
Si	Si35	1.0	0.95502	0.22944	0.43852	1.0000
Si	Si36	1.0	0.95403	0.48530	0.44732	1.0000
Si	Si37	1.0	0.51874	0.14928	0.37298	1.0000
Si	Si38	1.0	0.54043	0.33566	0.69133	1.0000
Si	Si39	1.0	0.79261	0.72469	0.68928	1.0000
Si	Si40	1.0	0.53465	0.71176	0.69795	1.0000
Si	Si41	1.0	0.79008	0.96720	0.70104	1.0000
Si	Si42	1.0	0.53153	0.95420	0.69879	1.0000

Si	Si43	1.0	0.20422	0.66043	0.19489	1.0000
Si	Si44	1.0	0.45706	0.66036	0.19319	1.0000
Si	Si45	1.0	0.19743	0.28179	0.19810	1.0000
Si	Si46	1.0	0.45469	0.29173	0.19318	1.0000
Si	Si47	1.0	0.20077	0.03835	0.19512	1.0000
Si	Si48	1.0	0.45983	0.04763	0.19196	1.0000
Si	Si49	1.0	0.14253	0.47154	0.13081	1.0000
Si	Si50	1.0	0.16041	0.86000	0.12025	1.0000
Si	Si51	1.0	0.53395	0.47691	0.12508	1.0000
Si	Si52	1.0	0.84154	0.15777	0.62456	1.0000
Si	Si53	1.0	0.46987	0.53276	0.62695	1.0000
Si	Si54	1.0	0.14944	0.14199	0.37973	1.0000
Si	Si55	1.0	0.52883	0.53546	0.37382	1.0000
Si	Si56	1.0	0.85066	0.84352	0.87381	1.0000
Si	Si57	1.0	0.47656	0.46520	0.87848	1.0000
Si	Si58	1.0	0.79581	0.34634	0.70071	1.0000
Si	Si59	1.0	0.34281	0.79851	0.04639	1.0000
Si	Si60	1.0	0.21248	0.70855	0.30702	1.0000

T7T7T7T9:

```
data_image0
  _chemical_formula_structural      H4O128Al4Si60
  _chemical_formula_sum           "H4 O128 Al4 Si60"
  _cell_length_a          12.5214
  _cell_length_b          12.576
  _cell_length_c          26.4428
  _cell_angle_alpha       89.4627
  _cell_angle_beta        89.7907
  _cell_angle_gamma       90.8127

  _space_group_name_H-M_alt    "P 1"
  _space_group_IT_number       1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy

  H   H1        1.0  0.47743  0.14777  0.53446  1.0000
  H   H2        1.0  0.85694  0.51818  0.71456  1.0000
  H   H3        1.0  0.52152  0.84307  0.03330  1.0000
  H   H4        1.0  0.10696  0.82440  0.35239  1.0000
  O   O1        1.0  0.32897  0.67252  0.05766  1.0000
  O   O2        1.0  0.33378  0.82652  0.98670  1.0000
  O   O3        1.0  0.26100  0.86522  0.08003  1.0000
  O   O4        1.0  0.31658  0.49100  0.00627  1.0000
```

O	O5	1.0	0.25456	0.49377	0.10100	1.0000
O	O6	1.0	0.45951	0.51376	0.07758	1.0000
O	O7	1.0	0.72165	0.65739	0.06197	1.0000
O	O8	1.0	0.85152	0.82526	0.05431	1.0000
O	O9	1.0	0.66702	0.83939	0.10566	1.0000
O	O10	1.0	0.84494	0.48795	0.06379	1.0000
O	O11	1.0	0.65518	0.47378	0.10320	1.0000
O	O12	1.0	0.97749	0.65595	0.05341	1.0000
O	O13	1.0	0.05005	0.83634	0.09010	1.0000
O	O14	1.0	0.04306	0.47484	0.09258	1.0000
O	O15	1.0	0.62768	0.33495	0.55426	1.0000
O	O16	1.0	0.67814	0.17839	0.49150	1.0000
O	O17	1.0	0.73567	0.16360	0.58856	1.0000
O	O18	1.0	0.53305	0.14445	0.56154	1.0000
O	O19	1.0	0.66929	0.51237	0.50116	1.0000
O	O20	1.0	0.77045	0.47192	0.58846	1.0000
O	O21	1.0	0.56328	0.52357	0.58480	1.0000
O	O22	1.0	0.28240	0.33091	0.57036	1.0000
O	O23	1.0	0.15001	0.16659	0.55487	1.0000
O	O24	1.0	0.33048	0.14266	0.60763	1.0000
O	O25	1.0	0.17217	0.50423	0.55132	1.0000
O	O26	1.0	0.35307	0.52028	0.60130	1.0000
O	O27	1.0	0.03259	0.34081	0.55408	1.0000
O	O28	1.0	0.95058	0.15992	0.59152	1.0000
O	O29	1.0	0.99404	0.51787	0.60424	1.0000
O	O30	1.0	0.33257	0.38442	0.30958	1.0000
O	O31	1.0	0.16360	0.32657	0.25357	1.0000
O	O32	1.0	0.20677	0.22210	0.33816	1.0000
O	O33	1.0	0.13609	0.42188	0.34057	1.0000
O	O34	1.0	0.49425	0.34439	0.24628	1.0000
O	O35	1.0	0.47410	0.23874	0.33401	1.0000
O	O36	1.0	0.53181	0.44417	0.33069	1.0000
O	O37	1.0	0.33762	0.73062	0.30367	1.0000
O	O38	1.0	0.18067	0.62776	0.35158	1.0000

O	O39	1.0	0.51434	0.84421	0.31191	1.0000
O	O40	1.0	0.50679	0.65128	0.34975	1.0000
O	O41	1.0	0.34173	0.96925	0.31338	1.0000
O	O42	1.0	0.13809	0.02538	0.35660	1.0000
O	O43	1.0	0.53061	0.03753	0.34453	1.0000
O	O44	1.0	0.67463	0.61961	0.81019	1.0000
O	O45	1.0	0.83030	0.65588	0.74072	1.0000
O	O46	1.0	0.82687	0.76565	0.82615	1.0000
O	O47	1.0	0.86977	0.55573	0.82480	1.0000
O	O48	1.0	0.50743	0.64743	0.75070	1.0000
O	O49	1.0	0.53966	0.77390	0.82989	1.0000
O	O50	1.0	0.47935	0.57255	0.84361	1.0000
O	O51	1.0	0.65488	0.28738	0.80774	1.0000
O	O52	1.0	0.82197	0.16231	0.82478	1.0000
O	O53	1.0	0.82034	0.35898	0.85723	1.0000
O	O54	1.0	0.48586	0.16226	0.81857	1.0000
O	O55	1.0	0.47329	0.36049	0.84428	1.0000
O	O56	1.0	0.65502	0.03292	0.81172	1.0000
O	O57	1.0	0.83219	0.96481	0.85532	1.0000
O	O58	1.0	0.47105	0.96763	0.84915	1.0000
O	O59	1.0	0.63038	0.65957	0.94276	1.0000
O	O60	1.0	0.65996	0.82082	0.00713	1.0000
O	O61	1.0	0.77232	0.81285	0.92126	1.0000
O	O62	1.0	0.56162	0.85310	0.92217	1.0000
O	O63	1.0	0.67669	0.49456	0.00271	1.0000
O	O64	1.0	0.78341	0.52708	0.91640	1.0000
O	O65	1.0	0.58005	0.46303	0.91559	1.0000
O	O66	1.0	0.29351	0.64676	0.94043	1.0000
O	O67	1.0	0.17028	0.81441	0.92270	1.0000
O	O68	1.0	0.36665	0.80781	0.88744	1.0000
O	O69	1.0	0.16686	0.47853	0.93551	1.0000
O	O70	1.0	0.36765	0.46058	0.91103	1.0000
O	O71	1.0	0.03773	0.64868	0.93326	1.0000
O	O72	1.0	0.97268	0.83077	0.89279	1.0000

O	O73	1.0	0.97936	0.46157	0.89671	1.0000
O	O74	1.0	0.34224	0.32096	0.43537	1.0000
O	O75	1.0	0.34637	0.17531	0.51009	1.0000
O	O76	1.0	0.22437	0.14303	0.43061	1.0000
O	O77	1.0	0.43895	0.13829	0.42227	1.0000
O	O78	1.0	0.35662	0.47366	0.50439	1.0000
O	O79	1.0	0.22595	0.49278	0.42596	1.0000
O	O80	1.0	0.43591	0.50678	0.41457	1.0000
O	O81	1.0	0.70224	0.35600	0.43774	1.0000
O	O82	1.0	0.83406	0.19374	0.42378	1.0000
O	O83	1.0	0.63681	0.18179	0.39275	1.0000
O	O84	1.0	0.83370	0.52464	0.43711	1.0000
O	O85	1.0	0.64262	0.54380	0.40224	1.0000
O	O86	1.0	0.96486	0.35790	0.44061	1.0000
O	O87	1.0	0.03270	0.18633	0.39486	1.0000
O	O88	1.0	0.02802	0.54430	0.40448	1.0000
O	O89	1.0	0.66921	0.36239	0.69665	1.0000
O	O90	1.0	0.83415	0.32180	0.75805	1.0000
O	O91	1.0	0.84252	0.26187	0.66136	1.0000
O	O92	1.0	0.49044	0.31493	0.74754	1.0000
O	O93	1.0	0.52442	0.23440	0.65625	1.0000
O	O94	1.0	0.48372	0.44202	0.67028	1.0000
O	O95	1.0	0.66300	0.71788	0.68948	1.0000
O	O96	1.0	0.83503	0.84762	0.69285	1.0000
O	O97	1.0	0.84171	0.66644	0.64155	1.0000
O	O98	1.0	0.49012	0.83104	0.70203	1.0000
O	O99	1.0	0.47628	0.64987	0.65218	1.0000
O	O100	1.0	0.66162	0.96240	0.69989	1.0000
O	O101	1.0	0.83616	0.04857	0.65758	1.0000
O	O102	1.0	0.48813	0.00798	0.64842	1.0000
O	O103	1.0	0.32927	0.62766	0.19613	1.0000
O	O104	1.0	0.16220	0.68032	0.25277	1.0000
O	O105	1.0	0.18490	0.76658	0.16125	1.0000
O	O106	1.0	0.13130	0.56292	0.17371	1.0000

O	O107	1.0	0.50402	0.67555	0.25016	1.0000
O	O108	1.0	0.47064	0.76524	0.15926	1.0000
O	O109	1.0	0.52333	0.56100	0.17063	1.0000
O	O110	1.0	0.32546	0.29416	0.19135	1.0000
O	O111	1.0	0.15782	0.16020	0.19083	1.0000
O	O112	1.0	0.13955	0.35399	0.15554	1.0000
O	O113	1.0	0.49744	0.17223	0.18893	1.0000
O	O114	1.0	0.50194	0.35924	0.14536	1.0000
O	O115	1.0	0.32997	0.03949	0.18980	1.0000
O	O116	1.0	0.15046	0.97385	0.14699	1.0000
O	O117	1.0	0.51261	0.98696	0.14539	1.0000
O	O118	1.0	0.01634	0.81896	0.99154	1.0000
O	O119	1.0	0.99828	0.48613	0.99566	1.0000
O	O120	1.0	0.98424	0.17927	0.49363	1.0000
O	O121	1.0	0.98970	0.51878	0.50373	1.0000
O	O122	1.0	0.16140	0.98363	0.24712	1.0000
O	O123	1.0	0.50075	0.00065	0.24615	1.0000
O	O124	1.0	0.83038	0.01012	0.75600	1.0000
O	O125	1.0	0.48803	0.01258	0.74984	1.0000
O	O126	1.0	0.85497	0.46532	0.68684	1.0000
O	O127	1.0	0.46752	0.84223	0.06099	1.0000
O	O128	1.0	0.15897	0.82587	0.32486	1.0000
Al	Al1	1.0	0.46221	0.13152	0.62504	1.0000
Al	Al2	1.0	0.86561	0.53775	0.62354	1.0000
Al	Al3	1.0	0.53707	0.86176	0.12477	1.0000
Al	Al4	1.0	0.20570	0.96541	0.30781	1.0000
Si	Si1	1.0	0.33952	0.54283	0.06095	1.0000
Si	Si2	1.0	0.72721	0.78641	0.05937	1.0000
Si	Si3	1.0	0.72365	0.52903	0.05792	1.0000
Si	Si4	1.0	0.97327	0.78424	0.04764	1.0000
Si	Si5	1.0	0.96568	0.52751	0.05144	1.0000
Si	Si6	1.0	0.64982	0.20986	0.54903	1.0000
Si	Si7	1.0	0.66066	0.46201	0.55802	1.0000
Si	Si8	1.0	0.27425	0.20322	0.56200	1.0000

Si	Si9	1.0	0.29053	0.45691	0.55722	1.0000
Si	Si10	1.0	0.02991	0.21302	0.54886	1.0000
Si	Si11	1.0	0.04649	0.47029	0.55446	1.0000
Si	Si12	1.0	0.21000	0.33759	0.31040	1.0000
Si	Si13	1.0	0.45855	0.35180	0.30512	1.0000
Si	Si14	1.0	0.46799	0.72563	0.30363	1.0000
Si	Si15	1.0	0.46781	0.96416	0.30330	1.0000
Si	Si16	1.0	0.14364	0.51881	0.38050	1.0000
Si	Si17	1.0	0.79975	0.65156	0.80094	1.0000
Si	Si18	1.0	0.54918	0.65336	0.80842	1.0000
Si	Si19	1.0	0.78269	0.28180	0.81214	1.0000
Si	Si20	1.0	0.52589	0.28158	0.80409	1.0000
Si	Si21	1.0	0.78425	0.04143	0.81143	1.0000
Si	Si22	1.0	0.52611	0.04344	0.80628	1.0000
Si	Si23	1.0	0.86112	0.47578	0.87378	1.0000
Si	Si24	1.0	0.65794	0.78615	0.94758	1.0000
Si	Si25	1.0	0.66797	0.53549	0.94463	1.0000
Si	Si26	1.0	0.29010	0.77403	0.93410	1.0000
Si	Si27	1.0	0.28650	0.51937	0.94824	1.0000
Si	Si28	1.0	0.04808	0.77744	0.93551	1.0000
Si	Si29	1.0	0.04589	0.52045	0.94088	1.0000
Si	Si30	1.0	0.48517	0.84971	0.87211	1.0000
Si	Si31	1.0	0.33699	0.19441	0.44861	1.0000
Si	Si32	1.0	0.34036	0.44839	0.44504	1.0000
Si	Si33	1.0	0.71296	0.22822	0.43624	1.0000
Si	Si34	1.0	0.71169	0.48379	0.44503	1.0000
Si	Si35	1.0	0.95502	0.22944	0.43852	1.0000
Si	Si36	1.0	0.95403	0.48530	0.44732	1.0000
Si	Si37	1.0	0.51874	0.14928	0.37298	1.0000
Si	Si38	1.0	0.54043	0.33566	0.69133	1.0000
Si	Si39	1.0	0.79261	0.72469	0.68928	1.0000
Si	Si40	1.0	0.53465	0.71176	0.69795	1.0000
Si	Si41	1.0	0.79008	0.96720	0.70104	1.0000
Si	Si42	1.0	0.53153	0.95420	0.69879	1.0000

Si	Si43	1.0	0.20422	0.66043	0.19489	1.0000
Si	Si44	1.0	0.45706	0.66036	0.19319	1.0000
Si	Si45	1.0	0.19743	0.28179	0.19810	1.0000
Si	Si46	1.0	0.45469	0.29173	0.19318	1.0000
Si	Si47	1.0	0.20077	0.03835	0.19512	1.0000
Si	Si48	1.0	0.45983	0.04763	0.19196	1.0000
Si	Si49	1.0	0.14253	0.47154	0.13081	1.0000
Si	Si50	1.0	0.16041	0.86000	0.12025	1.0000
Si	Si51	1.0	0.53395	0.47691	0.12508	1.0000
Si	Si52	1.0	0.84154	0.15777	0.62456	1.0000
Si	Si53	1.0	0.46987	0.53276	0.62695	1.0000
Si	Si54	1.0	0.14944	0.14199	0.37973	1.0000
Si	Si55	1.0	0.52883	0.53546	0.37382	1.0000
Si	Si56	1.0	0.85066	0.84352	0.87381	1.0000
Si	Si57	1.0	0.47656	0.46520	0.87848	1.0000
Si	Si58	1.0	0.79581	0.34634	0.70071	1.0000
Si	Si59	1.0	0.34281	0.79851	0.04639	1.0000
Si	Si60	1.0	0.21248	0.70855	0.30702	1.0000

AlSiAl-T2T7T7T9:

data_image0
_chemical_formula_structural H4O128Al4Si60
_chemical_formula_sum "H4 O128 Al4 Si60"
_cell_length_a 12.5456
_cell_length_b 12.5066
_cell_length_c 26.4317
_cell_angle_alpha 90.1171
_cell_angle_beta 90.2817
_cell_angle_gamma 90.5789

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47916	0.15168	0.52966	1.0000
H	H2	1.0	0.85303	0.51333	0.71906	1.0000
H	H3	1.0	0.55972	0.83427	0.35032	1.0000
H	H4	1.0	0.92621	0.98880	0.64269	1.0000
O	O1	1.0	0.29399	0.65946	0.06181	1.0000
O	O2	1.0	0.34419	0.81847	0.99861	1.0000
O	O3	1.0	0.23168	0.85667	0.08066	1.0000
O	O4	1.0	0.43880	0.80699	0.08644	1.0000

O	O5	1.0	0.34082	0.50638	0.99489	1.0000
O	O6	1.0	0.22851	0.46170	0.07729	1.0000
O	O7	1.0	0.43806	0.50886	0.08196	1.0000
O	O8	1.0	0.70186	0.67378	0.06392	1.0000
O	O9	1.0	0.83071	0.84275	0.05853	1.0000
O	O10	1.0	0.64036	0.86421	0.09667	1.0000
O	O11	1.0	0.83050	0.50460	0.06303	1.0000
O	O12	1.0	0.64276	0.49125	0.10566	1.0000
O	O13	1.0	0.95915	0.67332	0.05668	1.0000
O	O14	1.0	0.02214	0.85552	0.09793	1.0000
O	O15	1.0	0.02461	0.49683	0.10171	1.0000
O	O16	1.0	0.64080	0.33009	0.54880	1.0000
O	O17	1.0	0.68442	0.16965	0.48634	1.0000
O	O18	1.0	0.73539	0.15172	0.58507	1.0000
O	O19	1.0	0.53596	0.14677	0.55635	1.0000
O	O20	1.0	0.68468	0.51174	0.50120	1.0000
O	O21	1.0	0.77330	0.46931	0.59168	1.0000
O	O22	1.0	0.56532	0.51300	0.58198	1.0000
O	O23	1.0	0.28790	0.32800	0.56560	1.0000
O	O24	1.0	0.16172	0.15482	0.55098	1.0000
O	O25	1.0	0.34027	0.14230	0.60498	1.0000
O	O26	1.0	0.17245	0.50064	0.55313	1.0000
O	O27	1.0	0.35709	0.51416	0.60158	1.0000
O	O28	1.0	0.04379	0.32803	0.55320	1.0000
O	O29	1.0	0.96793	0.14407	0.59033	1.0000
O	O30	1.0	0.00038	0.49599	0.61062	1.0000
O	O31	1.0	0.34230	0.38122	0.31167	1.0000
O	O32	1.0	0.17475	0.34473	0.25156	1.0000
O	O33	1.0	0.20774	0.22016	0.33112	1.0000
O	O34	1.0	0.14672	0.42233	0.34373	1.0000
O	O35	1.0	0.49284	0.34044	0.24274	1.0000
O	O36	1.0	0.48451	0.22803	0.32679	1.0000
O	O37	1.0	0.54412	0.43531	0.32826	1.0000
O	O38	1.0	0.32841	0.71915	0.31259	1.0000

O	O39	1.0	0.14888	0.82966	0.31091	1.0000
O	O40	1.0	0.14988	0.63532	0.34690	1.0000
O	O41	1.0	0.49698	0.63288	0.35801	1.0000
O	O42	1.0	0.31905	0.95913	0.31037	1.0000
O	O43	1.0	0.13482	0.02336	0.34866	1.0000
O	O44	1.0	0.51788	0.02961	0.35612	1.0000
O	O45	1.0	0.67135	0.67480	0.81552	1.0000
O	O46	1.0	0.82175	0.64302	0.74405	1.0000
O	O47	1.0	0.86278	0.75867	0.82614	1.0000
O	O48	1.0	0.83704	0.54483	0.82936	1.0000
O	O49	1.0	0.51977	0.64770	0.74655	1.0000
O	O50	1.0	0.47741	0.74707	0.83353	1.0000
O	O51	1.0	0.50825	0.53969	0.83066	1.0000
O	O52	1.0	0.65551	0.31449	0.81632	1.0000
O	O53	1.0	0.79758	0.15730	0.82763	1.0000
O	O54	1.0	0.83751	0.34782	0.86423	1.0000
O	O55	1.0	0.51500	0.15487	0.81717	1.0000
O	O56	1.0	0.45984	0.34054	0.84910	1.0000
O	O57	1.0	0.65788	0.99903	0.80685	1.0000
O	O58	1.0	0.83940	0.96136	0.85346	1.0000
O	O59	1.0	0.46262	0.95740	0.83497	1.0000
O	O60	1.0	0.62337	0.66058	0.93731	1.0000
O	O61	1.0	0.66036	0.82810	0.99792	1.0000
O	O62	1.0	0.77700	0.80227	0.91577	1.0000
O	O63	1.0	0.57251	0.85646	0.90789	1.0000
O	O64	1.0	0.65384	0.50658	0.00614	1.0000
O	O65	1.0	0.76554	0.50830	0.92233	1.0000
O	O66	1.0	0.55643	0.46127	0.92059	1.0000
O	O67	1.0	0.28829	0.66591	0.93341	1.0000
O	O68	1.0	0.16964	0.83921	0.94124	1.0000
O	O69	1.0	0.35954	0.85128	0.90077	1.0000
O	O70	1.0	0.16320	0.49481	0.93957	1.0000
O	O71	1.0	0.35141	0.48444	0.89544	1.0000
O	O72	1.0	0.04076	0.66798	0.94442	1.0000

O	O73	1.0	0.98140	0.84556	0.89848	1.0000
O	O74	1.0	0.97074	0.48824	0.90247	1.0000
O	O75	1.0	0.30528	0.32545	0.43847	1.0000
O	O76	1.0	0.35081	0.17153	0.50621	1.0000
O	O77	1.0	0.24474	0.12787	0.41992	1.0000
O	O78	1.0	0.45522	0.17727	0.42324	1.0000
O	O79	1.0	0.35404	0.48228	0.50315	1.0000
O	O80	1.0	0.26110	0.52564	0.41419	1.0000
O	O81	1.0	0.46193	0.46497	0.41938	1.0000
O	O82	1.0	0.71784	0.35163	0.43766	1.0000
O	O83	1.0	0.84483	0.18507	0.42078	1.0000
O	O84	1.0	0.64961	0.18258	0.38679	1.0000
O	O85	1.0	0.84660	0.52232	0.43561	1.0000
O	O86	1.0	0.65492	0.53797	0.40136	1.0000
O	O87	1.0	0.97000	0.35032	0.44295	1.0000
O	O88	1.0	0.04621	0.18497	0.39418	1.0000
O	O89	1.0	0.05004	0.53558	0.41613	1.0000
O	O90	1.0	0.67272	0.35781	0.70154	1.0000
O	O91	1.0	0.83484	0.31787	0.76428	1.0000
O	O92	1.0	0.84515	0.25112	0.66853	1.0000
O	O93	1.0	0.49475	0.31269	0.74971	1.0000
O	O94	1.0	0.52922	0.23084	0.65725	1.0000
O	O95	1.0	0.49154	0.43990	0.67066	1.0000
O	O96	1.0	0.67151	0.71401	0.68274	1.0000
O	O97	1.0	0.84407	0.83523	0.70071	1.0000
O	O98	1.0	0.85936	0.65735	0.64603	1.0000
O	O99	1.0	0.50382	0.83179	0.69799	1.0000
O	O100	1.0	0.48348	0.64707	0.64851	1.0000
O	O101	1.0	0.67467	0.96367	0.69205	1.0000
O	O102	1.0	0.50186	0.00345	0.63921	1.0000
O	O103	1.0	0.34293	0.69260	0.18875	1.0000
O	O104	1.0	0.17573	0.66116	0.24910	1.0000
O	O105	1.0	0.15492	0.77307	0.16549	1.0000
O	O106	1.0	0.18363	0.56210	0.16232	1.0000

O	O107	1.0	0.49725	0.66654	0.25771	1.0000
O	O108	1.0	0.53765	0.76821	0.17231	1.0000
O	O109	1.0	0.50317	0.55598	0.17461	1.0000
O	O110	1.0	0.32517	0.29699	0.18473	1.0000
O	O111	1.0	0.15606	0.16923	0.19456	1.0000
O	O112	1.0	0.13418	0.35749	0.15319	1.0000
O	O113	1.0	0.49225	0.16436	0.18518	1.0000
O	O114	1.0	0.50708	0.35430	0.14338	1.0000
O	O115	1.0	0.32370	0.03852	0.19407	1.0000
O	O116	1.0	0.14352	0.98327	0.14938	1.0000
O	O117	1.0	0.49485	0.97107	0.14611	1.0000
O	O118	1.0	0.99769	0.84145	0.99841	1.0000
O	O119	1.0	0.99821	0.49980	0.00216	1.0000
O	O120	1.0	0.99370	0.16675	0.49156	1.0000
O	O121	1.0	0.98350	0.50819	0.51063	1.0000
O	O122	1.0	0.15184	0.99387	0.24944	1.0000
O	O123	1.0	0.49952	0.99280	0.24623	1.0000
O	O124	1.0	0.83580	0.01509	0.75507	1.0000
O	O125	1.0	0.50050	0.02165	0.74005	1.0000
O	O126	1.0	0.85730	0.45812	0.69192	1.0000
O	O127	1.0	0.50573	0.82854	0.32371	1.0000
O	O128	1.0	0.86132	0.02223	0.65532	1.0000
Al	Al1	1.0	0.47304	0.13119	0.62050	1.0000
Al	Al2	1.0	0.87314	0.52472	0.62836	1.0000
Al	Al3	1.0	0.45457	0.96632	0.30629	1.0000
Al	Al4	1.0	0.84918	0.15621	0.62159	1.0000
Si	Si1	1.0	0.32735	0.78586	0.05744	1.0000
Si	Si2	1.0	0.32577	0.53376	0.05449	1.0000
Si	Si3	1.0	0.70808	0.80178	0.05403	1.0000
Si	Si4	1.0	0.70799	0.54466	0.05939	1.0000
Si	Si5	1.0	0.95236	0.80246	0.05289	1.0000
Si	Si6	1.0	0.95316	0.54391	0.05586	1.0000
Si	Si7	1.0	0.52720	0.85417	0.12590	1.0000
Si	Si8	1.0	0.65722	0.20260	0.54432	1.0000

Si	Si9	1.0	0.66896	0.45713	0.55701	1.0000
Si	Si10	1.0	0.28211	0.19909	0.55885	1.0000
Si	Si11	1.0	0.29244	0.45571	0.55611	1.0000
Si	Si12	1.0	0.04029	0.19904	0.54752	1.0000
Si	Si13	1.0	0.04986	0.45753	0.55829	1.0000
Si	Si14	1.0	0.21734	0.34164	0.30970	1.0000
Si	Si15	1.0	0.46595	0.34516	0.30247	1.0000
Si	Si16	1.0	0.19933	0.71243	0.30459	1.0000
Si	Si17	1.0	0.19217	0.95271	0.30476	1.0000
Si	Si18	1.0	0.15245	0.52763	0.38019	1.0000
Si	Si19	1.0	0.79709	0.65574	0.80467	1.0000
Si	Si20	1.0	0.54383	0.65268	0.80665	1.0000
Si	Si21	1.0	0.78067	0.28381	0.81786	1.0000
Si	Si22	1.0	0.53094	0.28110	0.80664	1.0000
Si	Si23	1.0	0.78237	0.03395	0.81106	1.0000
Si	Si24	1.0	0.53353	0.03366	0.79915	1.0000
Si	Si25	1.0	0.85165	0.47249	0.88021	1.0000
Si	Si26	1.0	0.65826	0.78680	0.93966	1.0000
Si	Si27	1.0	0.64956	0.53418	0.94635	1.0000
Si	Si28	1.0	0.28993	0.79333	0.94385	1.0000
Si	Si29	1.0	0.28565	0.53777	0.94114	1.0000
Si	Si30	1.0	0.04746	0.79757	0.94595	1.0000
Si	Si31	1.0	0.04321	0.53858	0.94756	1.0000
Si	Si32	1.0	0.46982	0.85178	0.86970	1.0000
Si	Si33	1.0	0.33820	0.20023	0.44596	1.0000
Si	Si34	1.0	0.34466	0.45002	0.44401	1.0000
Si	Si35	1.0	0.72437	0.22279	0.43306	1.0000
Si	Si36	1.0	0.72582	0.48021	0.44504	1.0000
Si	Si37	1.0	0.96456	0.22156	0.43781	1.0000
Si	Si38	1.0	0.96299	0.47809	0.45180	1.0000
Si	Si39	1.0	0.52679	0.15230	0.37297	1.0000
Si	Si40	1.0	0.54527	0.33229	0.69334	1.0000
Si	Si41	1.0	0.79905	0.71288	0.69149	1.0000
Si	Si42	1.0	0.54418	0.70981	0.69373	1.0000

Si	Si43	1.0	0.54323	0.95505	0.69095	1.0000
Si	Si44	1.0	0.21424	0.67214	0.19085	1.0000
Si	Si45	1.0	0.46949	0.67080	0.19720	1.0000
Si	Si46	1.0	0.19826	0.29167	0.19632	1.0000
Si	Si47	1.0	0.45384	0.28705	0.18937	1.0000
Si	Si48	1.0	0.19539	0.04619	0.19739	1.0000
Si	Si49	1.0	0.45350	0.04081	0.19434	1.0000
Si	Si50	1.0	0.14242	0.47014	0.12335	1.0000
Si	Si51	1.0	0.13916	0.86643	0.12344	1.0000
Si	Si52	1.0	0.52202	0.47766	0.12630	1.0000
Si	Si53	1.0	0.47577	0.52630	0.62551	1.0000
Si	Si54	1.0	0.15795	0.13945	0.37373	1.0000
Si	Si55	1.0	0.53895	0.51591	0.37656	1.0000
Si	Si56	1.0	0.86332	0.84199	0.87384	1.0000
Si	Si57	1.0	0.46917	0.45798	0.87459	1.0000
Si	Si58	1.0	0.79913	0.33828	0.70584	1.0000
Si	Si59	1.0	0.45420	0.70439	0.31206	1.0000
Si	Si60	1.0	0.79904	0.95551	0.70331	1.0000

AlSiAl-T7T7T7T9:

data_image0
_chemical_formula_structural H4O128Al4Si60
_chemical_formula_sum "H4 O128 Al4 Si60"
_cell_length_a 12.5173
_cell_length_b 12.5866
_cell_length_c 26.4477
_cell_angle_alpha 89.8742
_cell_angle_beta 90.1761
_cell_angle_gamma 90.7997

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47522	0.15084	0.53191	1.0000
H	H2	1.0	0.86061	0.51689	0.71676	1.0000
H	H3	1.0	0.51847	0.84332	0.03610	1.0000
H	H4	1.0	0.91650	0.99230	0.64385	1.0000
O	O1	1.0	0.32337	0.67383	0.06039	1.0000
O	O2	1.0	0.33478	0.82644	0.98907	1.0000
O	O3	1.0	0.25914	0.86840	0.08148	1.0000
O	O4	1.0	0.32785	0.49808	0.00442	1.0000

O	O5	1.0	0.25343	0.48749	0.09686	1.0000
O	O6	1.0	0.45994	0.51977	0.08018	1.0000
O	O7	1.0	0.72008	0.65823	0.06147	1.0000
O	O8	1.0	0.85087	0.82528	0.05574	1.0000
O	O9	1.0	0.66722	0.83953	0.10675	1.0000
O	O10	1.0	0.84233	0.48834	0.06262	1.0000
O	O11	1.0	0.65578	0.47597	0.10417	1.0000
O	O12	1.0	0.97686	0.65569	0.05673	1.0000
O	O13	1.0	0.04897	0.83681	0.09291	1.0000
O	O14	1.0	0.04131	0.46897	0.09015	1.0000
O	O15	1.0	0.63189	0.32984	0.55061	1.0000
O	O16	1.0	0.68032	0.17135	0.48833	1.0000
O	O17	1.0	0.73243	0.15543	0.58657	1.0000
O	O18	1.0	0.53234	0.14354	0.55838	1.0000
O	O19	1.0	0.68100	0.50678	0.50040	1.0000
O	O20	1.0	0.76761	0.46840	0.59129	1.0000
O	O21	1.0	0.56095	0.51661	0.58060	1.0000
O	O22	1.0	0.28499	0.33220	0.56906	1.0000
O	O23	1.0	0.15782	0.16361	0.54961	1.0000
O	O24	1.0	0.33534	0.14477	0.60541	1.0000
O	O25	1.0	0.16890	0.50085	0.55030	1.0000
O	O26	1.0	0.35208	0.52154	0.60048	1.0000
O	O27	1.0	0.03470	0.33244	0.55469	1.0000
O	O28	1.0	0.96611	0.14732	0.59265	1.0000
O	O29	1.0	0.99422	0.50925	0.60555	1.0000
O	O30	1.0	0.33932	0.38303	0.31073	1.0000
O	O31	1.0	0.16950	0.33456	0.25333	1.0000
O	O32	1.0	0.20179	0.23027	0.33803	1.0000
O	O33	1.0	0.14414	0.43382	0.33997	1.0000
O	O34	1.0	0.49647	0.34966	0.24410	1.0000
O	O35	1.0	0.48828	0.24049	0.32961	1.0000
O	O36	1.0	0.53828	0.44863	0.32857	1.0000
O	O37	1.0	0.33061	0.71817	0.30723	1.0000
O	O38	1.0	0.15815	0.83668	0.31399	1.0000

O	O39	1.0	0.15663	0.64443	0.35045	1.0000
O	O40	1.0	0.50192	0.84179	0.31308	1.0000
O	O41	1.0	0.50395	0.65105	0.35372	1.0000
O	O42	1.0	0.32964	0.96534	0.30707	1.0000
O	O43	1.0	0.14815	0.02837	0.34838	1.0000
O	O44	1.0	0.50895	0.03498	0.34772	1.0000
O	O45	1.0	0.67163	0.62540	0.81061	1.0000
O	O46	1.0	0.83159	0.64937	0.74318	1.0000
O	O47	1.0	0.83005	0.76419	0.82755	1.0000
O	O48	1.0	0.86322	0.55214	0.82738	1.0000
O	O49	1.0	0.50566	0.64960	0.74895	1.0000
O	O50	1.0	0.53095	0.77380	0.82963	1.0000
O	O51	1.0	0.47703	0.57050	0.84065	1.0000
O	O52	1.0	0.65285	0.28391	0.81004	1.0000
O	O53	1.0	0.82317	0.16330	0.82600	1.0000
O	O54	1.0	0.81589	0.35667	0.86263	1.0000
O	O55	1.0	0.48248	0.16148	0.81553	1.0000
O	O56	1.0	0.47069	0.35859	0.84409	1.0000
O	O57	1.0	0.65541	0.03511	0.81117	1.0000
O	O58	1.0	0.83011	0.96442	0.85635	1.0000
O	O59	1.0	0.47236	0.96960	0.84845	1.0000
O	O60	1.0	0.62885	0.66068	0.94342	1.0000
O	O61	1.0	0.65924	0.82269	0.00776	1.0000
O	O62	1.0	0.77144	0.81254	0.92203	1.0000
O	O63	1.0	0.56198	0.85417	0.92170	1.0000
O	O64	1.0	0.66979	0.49467	0.00339	1.0000
O	O65	1.0	0.78338	0.52756	0.91979	1.0000
O	O66	1.0	0.57878	0.46569	0.91406	1.0000
O	O67	1.0	0.29295	0.65099	0.93849	1.0000
O	O68	1.0	0.16939	0.82002	0.92561	1.0000
O	O69	1.0	0.36383	0.81701	0.88930	1.0000
O	O70	1.0	0.16756	0.48179	0.93835	1.0000
O	O71	1.0	0.36517	0.46431	0.90864	1.0000
O	O72	1.0	0.03956	0.65189	0.93254	1.0000

O	O73	1.0	0.97193	0.83536	0.89560	1.0000
O	O74	1.0	0.98034	0.46354	0.89674	1.0000
O	O75	1.0	0.31743	0.32766	0.43506	1.0000
O	O76	1.0	0.35106	0.18078	0.50748	1.0000
O	O77	1.0	0.23496	0.13477	0.42552	1.0000
O	O78	1.0	0.44805	0.16373	0.42169	1.0000
O	O79	1.0	0.35438	0.47826	0.50343	1.0000
O	O80	1.0	0.23960	0.51930	0.42094	1.0000
O	O81	1.0	0.44837	0.49162	0.41606	1.0000
O	O82	1.0	0.68105	0.34829	0.43421	1.0000
O	O83	1.0	0.83761	0.20587	0.42240	1.0000
O	O84	1.0	0.64591	0.16589	0.38859	1.0000
O	O85	1.0	0.83742	0.49241	0.43256	1.0000
O	O86	1.0	0.64899	0.54506	0.40223	1.0000
O	O87	1.0	0.99274	0.34821	0.43982	1.0000
O	O88	1.0	0.03421	0.16745	0.39537	1.0000
O	O89	1.0	0.03141	0.54164	0.40846	1.0000
O	O90	1.0	0.67014	0.36669	0.69961	1.0000
O	O91	1.0	0.83247	0.33035	0.76337	1.0000
O	O92	1.0	0.84152	0.25540	0.66945	1.0000
O	O93	1.0	0.49087	0.31738	0.74695	1.0000
O	O94	1.0	0.52923	0.23447	0.65609	1.0000
O	O95	1.0	0.48583	0.44138	0.66828	1.0000
O	O96	1.0	0.66633	0.71384	0.69044	1.0000
O	O97	1.0	0.83886	0.83890	0.69821	1.0000
O	O98	1.0	0.84671	0.66149	0.64364	1.0000
O	O99	1.0	0.49608	0.83057	0.69778	1.0000
O	O100	1.0	0.48271	0.64765	0.64923	1.0000
O	O101	1.0	0.66657	0.96417	0.69679	1.0000
O	O102	1.0	0.49166	0.01007	0.64671	1.0000
O	O103	1.0	0.32963	0.62536	0.19394	1.0000
O	O104	1.0	0.16101	0.67254	0.25123	1.0000
O	O105	1.0	0.18904	0.77203	0.16382	1.0000
O	O106	1.0	0.13138	0.56899	0.16746	1.0000

O	O107	1.0	0.49915	0.67039	0.25365	1.0000
O	O108	1.0	0.47627	0.76228	0.16277	1.0000
O	O109	1.0	0.52556	0.55724	0.17392	1.0000
O	O110	1.0	0.32735	0.29510	0.18957	1.0000
O	O111	1.0	0.15803	0.16571	0.19141	1.0000
O	O112	1.0	0.14016	0.35741	0.15555	1.0000
O	O113	1.0	0.49853	0.17255	0.18957	1.0000
O	O114	1.0	0.50346	0.35764	0.14350	1.0000
O	O115	1.0	0.32973	0.04174	0.19121	1.0000
O	O116	1.0	0.14870	0.97676	0.14901	1.0000
O	O117	1.0	0.51185	0.98480	0.14760	1.0000
O	O118	1.0	0.01648	0.81713	0.99436	1.0000
O	O119	1.0	0.99393	0.49165	0.99458	1.0000
O	O120	1.0	0.98289	0.17086	0.49370	1.0000
O	O121	1.0	0.98102	0.50719	0.50552	1.0000
O	O122	1.0	0.16045	0.99533	0.24881	1.0000
O	O123	1.0	0.49843	0.00225	0.24817	1.0000
O	O124	1.0	0.83156	0.00985	0.75758	1.0000
O	O125	1.0	0.49210	0.00795	0.74844	1.0000
O	O126	1.0	0.85768	0.46335	0.68923	1.0000
O	O127	1.0	0.46606	0.83987	0.06418	1.0000
O	O128	1.0	0.85366	0.02743	0.65766	1.0000
Al	Al1	1.0	0.46769	0.13360	0.62252	1.0000
Al	Al2	1.0	0.86683	0.53103	0.62545	1.0000
Al	Al3	1.0	0.53837	0.85913	0.12763	1.0000
Al	Al4	1.0	0.84603	0.16032	0.62313	1.0000
Si	Si1	1.0	0.34065	0.54469	0.06105	1.0000
Si	Si2	1.0	0.72629	0.78712	0.06002	1.0000
Si	Si3	1.0	0.72098	0.52984	0.05796	1.0000
Si	Si4	1.0	0.97256	0.78362	0.05020	1.0000
Si	Si5	1.0	0.96320	0.52781	0.05128	1.0000
Si	Si6	1.0	0.65211	0.20359	0.54614	1.0000
Si	Si7	1.0	0.66303	0.45623	0.55665	1.0000
Si	Si8	1.0	0.27903	0.20488	0.55967	1.0000

Si	Si9	1.0	0.28925	0.45799	0.55594	1.0000
Si	Si10	1.0	0.03458	0.20410	0.54853	1.0000
Si	Si11	1.0	0.04456	0.46179	0.55515	1.0000
Si	Si12	1.0	0.21384	0.34552	0.31087	1.0000
Si	Si13	1.0	0.46560	0.35495	0.30352	1.0000
Si	Si14	1.0	0.20193	0.71771	0.30558	1.0000
Si	Si15	1.0	0.45951	0.72018	0.30677	1.0000
Si	Si16	1.0	0.20040	0.95712	0.30437	1.0000
Si	Si17	1.0	0.45898	0.96126	0.30328	1.0000
Si	Si18	1.0	0.14427	0.53285	0.37968	1.0000
Si	Si19	1.0	0.79820	0.64992	0.80298	1.0000
Si	Si20	1.0	0.54527	0.65460	0.80722	1.0000
Si	Si21	1.0	0.78085	0.28300	0.81528	1.0000
Si	Si22	1.0	0.52418	0.28120	0.80331	1.0000
Si	Si23	1.0	0.78423	0.04302	0.81306	1.0000
Si	Si24	1.0	0.52620	0.04337	0.80501	1.0000
Si	Si25	1.0	0.85889	0.47449	0.87677	1.0000
Si	Si26	1.0	0.65696	0.78705	0.94819	1.0000
Si	Si27	1.0	0.66541	0.53637	0.94540	1.0000
Si	Si28	1.0	0.28945	0.77858	0.93553	1.0000
Si	Si29	1.0	0.28850	0.52404	0.94753	1.0000
Si	Si30	1.0	0.04798	0.78029	0.93760	1.0000
Si	Si31	1.0	0.04634	0.52402	0.94103	1.0000
Si	Si32	1.0	0.48294	0.85249	0.87232	1.0000
Si	Si33	1.0	0.33714	0.20248	0.44656	1.0000
Si	Si34	1.0	0.33970	0.45460	0.44368	1.0000
Si	Si35	1.0	0.71231	0.22353	0.43367	1.0000
Si	Si36	1.0	0.71202	0.47311	0.44319	1.0000
Si	Si37	1.0	0.96176	0.22266	0.43836	1.0000
Si	Si38	1.0	0.96026	0.47191	0.44742	1.0000
Si	Si39	1.0	0.52213	0.15237	0.37132	1.0000
Si	Si40	1.0	0.54311	0.33686	0.69105	1.0000
Si	Si41	1.0	0.79530	0.71600	0.69158	1.0000
Si	Si42	1.0	0.53713	0.70977	0.69601	1.0000

Si	Si43	1.0	0.53465	0.95416	0.69622	1.0000
Si	Si44	1.0	0.20486	0.66050	0.19403	1.0000
Si	Si45	1.0	0.45774	0.65686	0.19558	1.0000
Si	Si46	1.0	0.19971	0.28735	0.19806	1.0000
Si	Si47	1.0	0.45657	0.29296	0.19197	1.0000
Si	Si48	1.0	0.20113	0.04495	0.19540	1.0000
Si	Si49	1.0	0.46009	0.04863	0.19333	1.0000
Si	Si50	1.0	0.14237	0.47147	0.12789	1.0000
Si	Si51	1.0	0.16022	0.86207	0.12239	1.0000
Si	Si52	1.0	0.53513	0.47750	0.12641	1.0000
Si	Si53	1.0	0.47154	0.52991	0.62421	1.0000
Si	Si54	1.0	0.15404	0.14149	0.37692	1.0000
Si	Si55	1.0	0.53377	0.53433	0.37462	1.0000
Si	Si56	1.0	0.85026	0.84382	0.87532	1.0000
Si	Si57	1.0	0.47467	0.46575	0.87684	1.0000
Si	Si58	1.0	0.79663	0.34598	0.70455	1.0000
Si	Si59	1.0	0.34057	0.79907	0.04881	1.0000
Si	Si60	1.0	0.79229	0.95689	0.70495	1.0000

AlSiAl-T7T7T9T9

```
#=====
# CRYSTAL DATA
#-----
data_VESTA_phase_1

_chemical_name_common          '18T7T7T9-3'
_cell_length_a                 12.537343
_cell_length_b                 12.501813
_cell_length_c                 26.238811
_cell_angle_alpha               90.040115
_cell_angle_beta                91.547363
_cell_angle_gamma               89.568214
_cell_volume                    4111.041693
_space_group_name_H-M_alt      'P 1'
_space_group_IT_number          1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_label
_atom_site_occupancy
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_adp_type
_atom_site_U_iso_or_equiv
_atom_site_type_symbol

H1      1.0    0.498164    0.153744    0.534960    Uiso ? H
H2      1.0    0.861534    0.524221    0.722344    Uiso ? H
H3      1.0    0.073344    0.975749    0.358140    Uiso ? H
```

H4	1.0	0.861723	0.968176	0.679698	Uiso	? H
O1	1.0	0.314449	0.653612	0.059594	Uiso	? O
O2	1.0	0.333772	0.815777	-0.005220	Uiso	? O
O3	1.0	0.225350	0.840728	0.079210	Uiso	? O
O4	1.0	0.436122	0.821576	0.082961	Uiso	? O
O5	1.0	0.330204	0.499560	0.988775	Uiso	? O
O6	1.0	0.220965	0.465668	0.070668	Uiso	? O
O7	1.0	0.433732	0.480241	0.076683	Uiso	? O
O8	1.0	0.690123	0.676951	0.064612	Uiso	? O
O9	1.0	0.826819	0.838987	0.061977	Uiso	? O
O10	1.0	0.638636	0.867124	0.099565	Uiso	? O
O11	1.0	0.822928	0.510394	0.058617	Uiso	? O
O12	1.0	0.638999	0.489012	0.102982	Uiso	? O
O13	1.0	0.960942	0.672088	0.056732	Uiso	? O
O14	1.0	0.019968	0.856930	0.097594	Uiso	? O
O15	1.0	0.017321	0.485342	0.096059	Uiso	? O
O16	1.0	0.670668	0.324658	0.554131	Uiso	? O
O17	1.0	0.696457	0.159321	0.491137	Uiso	? O
O18	1.0	0.757252	0.139551	0.590472	Uiso	? O
O19	1.0	0.555141	0.149884	0.562406	Uiso	? O
O20	1.0	0.700530	0.500478	0.501436	Uiso	? O
O21	1.0	0.773786	0.485905	0.597653	Uiso	? O
O22	1.0	0.565615	0.504831	0.576507	Uiso	? O
O23	1.0	0.298360	0.323133	0.571971	Uiso	? O
O24	1.0	0.176514	0.151394	0.554913	Uiso	? O
O25	1.0	0.361889	0.134648	0.608923	Uiso	? O
O26	1.0	0.176624	0.493632	0.553583	Uiso	? O
O27	1.0	0.362320	0.513547	0.602681	Uiso	? O
O28	1.0	0.051993	0.322957	0.560008	Uiso	? O
O29	1.0	0.986706	0.141254	0.599622	Uiso	? O
O30	1.0	0.004322	0.503578	0.609078	Uiso	? O
O31	1.0	0.345319	0.372452	0.314195	Uiso	? O
O32	1.0	0.184203	0.348220	0.247967	Uiso	? O
O33	1.0	0.203627	0.214938	0.326643	Uiso	? O

O34	1.0	0.148209	0.420259	0.340332	Uiso	? O
O35	1.0	0.494283	0.337364	0.244991	Uiso	? O
O36	1.0	0.498097	0.224974	0.329925	Uiso	? O
O37	1.0	0.544849	0.434118	0.330358	Uiso	? O
O38	1.0	0.330528	0.702068	0.311213	Uiso	? O
O39	1.0	0.157080	0.819767	0.302355	Uiso	? O
O40	1.0	0.148201	0.632776	0.346790	Uiso	? O
O41	1.0	0.497426	0.829071	0.316175	Uiso	? O
O42	1.0	0.507439	0.636795	0.356483	Uiso	? O
O43	1.0	0.326126	0.956406	0.308652	Uiso	? O
O44	1.0	0.505477	0.022333	0.355051	Uiso	? O
O45	1.0	0.648216	0.673730	0.807454	Uiso	? O
O46	1.0	0.821010	0.657195	0.747967	Uiso	? O
O47	1.0	0.839347	0.724957	0.844366	Uiso	? O
O48	1.0	0.797689	0.523808	0.824065	Uiso	? O
O49	1.0	0.491405	0.675624	0.736771	Uiso	? O
O50	1.0	0.471424	0.783055	0.822746	Uiso	? O
O51	1.0	0.464738	0.570489	0.821966	Uiso	? O
O52	1.0	0.665866	0.280266	0.810643	Uiso	? O
O53	1.0	0.827424	0.143254	0.817385	Uiso	? O
O54	1.0	0.840730	0.332281	0.863420	Uiso	? O
O55	1.0	0.484562	0.175243	0.812644	Uiso	? O
O56	1.0	0.492488	0.368020	0.849757	Uiso	? O
O57	1.0	0.645415	0.034720	0.829106	Uiso	? O
O58	1.0	0.832624	0.931740	0.824027	Uiso	? O
O59	1.0	0.452081	0.985061	0.852567	Uiso	? O
O60	1.0	0.677114	0.674032	0.936838	Uiso	? O
O61	1.0	0.656997	0.839203	0.999631	Uiso	? O
O62	1.0	0.752383	0.861139	0.910565	Uiso	? O
O63	1.0	0.542511	0.837144	0.915111	Uiso	? O
O64	1.0	0.640986	0.516363	0.003099	Uiso	? O
O65	1.0	0.745521	0.478361	0.919515	Uiso	? O
O66	1.0	0.535305	0.523553	0.915632	Uiso	? O
O67	1.0	0.272312	0.663109	0.930112	Uiso	? O

O68	1.0	0.153713	0.840105	0.939896	Uiso	? O
O69	1.0	0.335426	0.845639	0.894336	Uiso	? O
O70	1.0	0.147284	0.495603	0.932875	Uiso	? O
O71	1.0	0.335589	0.480828	0.888650	Uiso	? O
O72	1.0	0.025219	0.672461	0.938883	Uiso	? O
O73	1.0	0.962020	0.857417	0.897068	Uiso	? O
O74	1.0	0.950875	0.497421	0.895735	Uiso	? O
O75	1.0	0.321687	0.318980	0.437009	Uiso	? O
O76	1.0	0.367210	0.172637	0.510729	Uiso	? O
O77	1.0	0.265067	0.117952	0.423146	Uiso	? O
O78	1.0	0.471762	0.168900	0.427530	Uiso	? O
O79	1.0	0.357277	0.472106	0.504697	Uiso	? O
O80	1.0	0.256229	0.516920	0.416120	Uiso	? O
O81	1.0	0.462334	0.475551	0.420233	Uiso	? O
O82	1.0	0.687809	0.336696	0.435827	Uiso	? O
O83	1.0	0.849403	0.198520	0.426193	Uiso	? O
O84	1.0	0.660016	0.149490	0.389898	Uiso	? O
O85	1.0	0.849598	0.473198	0.431087	Uiso	? O
O86	1.0	0.659715	0.533914	0.402901	Uiso	? O
O87	1.0	0.011250	0.333260	0.442175	Uiso	? O
O88	1.0	0.039821	0.144178	0.400049	Uiso	? O
O89	1.0	0.044180	0.529342	0.412362	Uiso	? O
O90	1.0	0.686201	0.371297	0.703549	Uiso	? O
O91	1.0	0.849289	0.318321	0.763274	Uiso	? O
O92	1.0	0.857578	0.269580	0.663831	Uiso	? O
O93	1.0	0.504535	0.340714	0.749313	Uiso	? O
O94	1.0	0.527344	0.272046	0.653218	Uiso	? O
O95	1.0	0.514524	0.478526	0.674345	Uiso	? O
O96	1.0	0.667968	0.705302	0.684019	Uiso	? O
O97	1.0	0.822909	0.851384	0.694757	Uiso	? O
O98	1.0	0.864071	0.667205	0.650599	Uiso	? O
O99	1.0	0.515111	0.850632	0.683360	Uiso	? O
O100	1.0	0.487358	0.666841	0.634296	Uiso	? O
O101	1.0	0.686170	0.936462	0.730182	Uiso	? O

O102	1.0	0.559874	0.050917	0.659865	Uiso	? O
O103	1.0	0.338197	0.688365	0.186864	Uiso	? O
O104	1.0	0.174987	0.643625	0.246810	Uiso	? O
O105	1.0	0.152199	0.778754	0.169416	Uiso	? O
O106	1.0	0.173405	0.569305	0.153991	Uiso	? O
O107	1.0	0.497454	0.657010	0.255396	Uiso	? O
O108	1.0	0.532767	0.756365	0.168758	Uiso	? O
O109	1.0	0.492240	0.547405	0.169695	Uiso	? O
O110	1.0	0.331921	0.290757	0.181459	Uiso	? O
O111	1.0	0.158728	0.171618	0.191118	Uiso	? O
O112	1.0	0.142081	0.359174	0.148901	Uiso	? O
O113	1.0	0.500712	0.159393	0.189701	Uiso	? O
O114	1.0	0.518665	0.345051	0.145057	Uiso	? O
O115	1.0	0.327288	0.040374	0.196208	Uiso	? O
O116	1.0	0.151939	0.984499	0.145079	Uiso	? O
O117	1.0	0.498155	0.964391	0.153380	Uiso	? O
O118	1.0	-0.016240	0.840981	-0.002780	Uiso	? O
O119	1.0	0.985196	0.503731	0.996026	Uiso	? O
O120	1.0	-0.003397	0.160355	0.499473	Uiso	? O
O121	1.0	0.986792	0.493985	0.508192	Uiso	? O
O122	1.0	0.155615	0.994952	0.246479	Uiso	? O
O123	1.0	0.497264	-0.004750	0.253992	Uiso	? O
O124	1.0	0.735889	0.035092	0.740843	Uiso	? O
O125	1.0	0.498446	0.002426	0.754585	Uiso	? O
O126	1.0	0.871728	0.469367	0.695468	Uiso	? O
O127	1.0	0.142281	0.002409	0.347486	Uiso	? O
O128	1.0	0.881352	0.045650	0.679847	Uiso	? O
Al1	1.0	0.494868	0.151661	0.626192	Uiso	? Al
Al2	1.0	0.881394	0.535662	0.631251	Uiso	? Al
Al3	1.0	0.166244	0.136954	0.377249	Uiso	? Al
Al4	1.0	0.868198	0.146922	0.632329	Uiso	? Al
Si1	1.0	0.327713	0.782548	0.054464	Uiso	? Si
Si2	1.0	0.325482	0.525310	0.049277	Uiso	? Si
Si3	1.0	0.703202	0.804688	0.055925	Uiso	? Si

Si4	1.0	0.698994	0.548355	0.057249	Uiso	? Si
Si5	1.0	0.948278	0.801182	0.053139	Uiso	? Si
Si6	1.0	0.946337	0.543519	0.051627	Uiso	? Si
Si7	1.0	0.525078	0.851748	0.126592	Uiso	? Si
Si8	1.0	0.679661	0.195815	0.549890	Uiso	? Si
Si9	1.0	0.679497	0.454709	0.558566	Uiso	? Si
Si10	1.0	0.297356	0.194152	0.563355	Uiso	? Si
Si11	1.0	0.297883	0.449363	0.558123	Uiso	? Si
Si12	1.0	0.052212	0.193136	0.554441	Uiso	? Si
Si13	1.0	0.054171	0.452948	0.559058	Uiso	? Si
Si14	1.0	0.219875	0.335992	0.308201	Uiso	? Si
Si15	1.0	0.470005	0.341587	0.305426	Uiso	? Si
Si16	1.0	0.203279	0.697139	0.302002	Uiso	? Si
Si17	1.0	0.459204	0.705837	0.309631	Uiso	? Si
Si18	1.0	0.457161	0.951547	0.308582	Uiso	? Si
Si19	1.0	0.150234	0.521775	0.379149	Uiso	? Si
Si20	1.0	0.774891	0.646427	0.805235	Uiso	? Si
Si21	1.0	0.518983	0.674751	0.797232	Uiso	? Si
Si22	1.0	0.794685	0.270230	0.813269	Uiso	? Si
Si23	1.0	0.537010	0.292780	0.804722	Uiso	? Si
Si24	1.0	0.763991	0.034220	0.806299	Uiso	? Si
Si25	1.0	0.519262	0.050932	0.811730	Uiso	? Si
Si26	1.0	0.833913	0.459549	0.876284	Uiso	? Si
Si27	1.0	0.656508	0.802596	0.940333	Uiso	? Si
Si28	1.0	0.649095	0.547777	0.943398	Uiso	? Si
Si29	1.0	0.273639	0.790566	0.940346	Uiso	? Si
Si30	1.0	0.270954	0.534089	0.935242	Uiso	? Si
Si31	1.0	0.031199	0.801709	0.943340	Uiso	? Si
Si32	1.0	0.027727	0.542793	0.941131	Uiso	? Si
Si33	1.0	0.451980	0.861076	0.871161	Uiso	? Si
Si34	1.0	0.353188	0.193672	0.449010	Uiso	? Si
Si35	1.0	0.349026	0.445613	0.444416	Uiso	? Si
Si36	1.0	0.724111	0.211415	0.436100	Uiso	? Si
Si37	1.0	0.725298	0.460441	0.444194	Uiso	? Si

Si38	1.0	0.974914	0.207780	0.442293	Uiso	? Si
Si39	1.0	0.972700	0.456637	0.449237	Uiso	? Si
Si40	1.0	0.533427	0.142390	0.375300	Uiso	? Si
Si41	1.0	0.557531	0.362158	0.693699	Uiso	? Si
Si42	1.0	0.795110	0.724695	0.693145	Uiso	? Si
Si43	1.0	0.540401	0.722532	0.684384	Uiso	? Si
Si44	1.0	0.556624	0.964627	0.702943	Uiso	? Si
Si45	1.0	0.209978	0.668757	0.188861	Uiso	? Si
Si46	1.0	0.465152	0.661737	0.195139	Uiso	? Si
Si47	1.0	0.205177	0.292778	0.193316	Uiso	? Si
Si48	1.0	0.460499	0.283154	0.190878	Uiso	? Si
Si49	1.0	0.198781	0.048851	0.194223	Uiso	? Si
Si50	1.0	0.456303	0.039897	0.198574	Uiso	? Si
Si51	1.0	0.138756	0.470118	0.117609	Uiso	? Si
Si52	1.0	0.138656	0.864183	0.122806	Uiso	? Si
Si53	1.0	0.520319	0.466386	0.123438	Uiso	? Si
Si54	1.0	0.483928	0.538631	0.620788	Uiso	? Si
Si55	1.0	0.542016	0.519310	0.377427	Uiso	? Si
Si56	1.0	0.845896	0.843078	0.869518	Uiso	? Si
Si57	1.0	0.457180	0.485776	0.868596	Uiso	? Si
Si58	1.0	0.813128	0.348718	0.704885	Uiso	? Si
Si59	1.0	0.200473	0.940125	0.298314	Uiso	? Si

T1T7T7T7T7:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5388

_cell_length_b 12.5507

_cell_length_c 26.4417

_cell_angle_alpha 89.8792

_cell_angle_beta 89.9276

_cell_angle_gamma 91.0103

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47893	0.14076	0.53288	1.0000
H	H2	1.0	0.85965	0.51665	0.71693	1.0000
H	H3	1.0	0.52013	0.86151	0.03291	1.0000
H	H4	1.0	0.12802	0.82433	0.36097	1.0000
H	H5	1.0	0.13835	0.48349	0.21708	1.0000
O	O1	1.0	0.37345	0.66924	0.05050	1.0000
O	O2	1.0	0.32596	0.83116	0.98915	1.0000
O	O3	1.0	0.26162	0.83493	0.08589	1.0000

O	O4	1.0	0.31111	0.48805	0.00575	1.0000
O	O5	1.0	0.23847	0.53778	0.09710	1.0000
O	O6	1.0	0.44211	0.48244	0.08140	1.0000
O	O7	1.0	0.71956	0.66107	0.05924	1.0000
O	O8	1.0	0.84964	0.83138	0.05467	1.0000
O	O9	1.0	0.66672	0.83984	0.10599	1.0000
O	O10	1.0	0.83336	0.48713	0.05254	1.0000
O	O11	1.0	0.64927	0.47926	0.10024	1.0000
O	O12	1.0	0.96583	0.65771	0.05233	1.0000
O	O13	1.0	0.04850	0.83487	0.09185	1.0000
O	O14	1.0	0.01459	0.48080	0.10092	1.0000
O	O15	1.0	0.62821	0.33244	0.55159	1.0000
O	O16	1.0	0.67490	0.17192	0.49002	1.0000
O	O17	1.0	0.73640	0.16297	0.58719	1.0000
O	O18	1.0	0.53268	0.14157	0.56061	1.0000
O	O19	1.0	0.68262	0.51550	0.50511	1.0000
O	O20	1.0	0.76550	0.46523	0.59449	1.0000
O	O21	1.0	0.55957	0.51843	0.58356	1.0000
O	O22	1.0	0.28049	0.33466	0.56003	1.0000
O	O23	1.0	0.14860	0.16650	0.55302	1.0000
O	O24	1.0	0.32966	0.15381	0.60571	1.0000
O	O25	1.0	0.16875	0.50980	0.55254	1.0000
O	O26	1.0	0.35148	0.51616	0.60134	1.0000
O	O27	1.0	0.03340	0.34155	0.55280	1.0000
O	O28	1.0	0.95033	0.16235	0.59116	1.0000
O	O29	1.0	0.98912	0.51810	0.60291	1.0000
O	O30	1.0	0.33031	0.37892	0.31009	1.0000
O	O31	1.0	0.17114	0.34119	0.24349	1.0000
O	O32	1.0	0.18497	0.22491	0.32762	1.0000
O	O33	1.0	0.13304	0.43205	0.33058	1.0000
O	O34	1.0	0.49703	0.34790	0.24938	1.0000
O	O35	1.0	0.46419	0.22377	0.33057	1.0000
O	O36	1.0	0.52896	0.42528	0.33985	1.0000
O	O37	1.0	0.35147	0.72191	0.30730	1.0000

O	O38	1.0	0.19516	0.62620	0.35903	1.0000
O	O39	1.0	0.52751	0.83795	0.31673	1.0000
O	O40	1.0	0.52971	0.63769	0.34187	1.0000
O	O41	1.0	0.35661	0.96445	0.31673	1.0000
O	O42	1.0	0.15649	0.02901	0.36095	1.0000
O	O43	1.0	0.54580	0.03330	0.34677	1.0000
O	O44	1.0	0.66821	0.62124	0.81004	1.0000
O	O45	1.0	0.82602	0.65690	0.74225	1.0000
O	O46	1.0	0.82137	0.76585	0.82810	1.0000
O	O47	1.0	0.86346	0.55625	0.82653	1.0000
O	O48	1.0	0.50272	0.65253	0.74940	1.0000
O	O49	1.0	0.53388	0.77567	0.83069	1.0000
O	O50	1.0	0.46950	0.57440	0.84006	1.0000
O	O51	1.0	0.65132	0.29420	0.80816	1.0000
O	O52	1.0	0.81398	0.16381	0.82601	1.0000
O	O53	1.0	0.81720	0.36023	0.85905	1.0000
O	O54	1.0	0.48747	0.16247	0.81894	1.0000
O	O55	1.0	0.46479	0.36198	0.84153	1.0000
O	O56	1.0	0.65233	0.02652	0.81309	1.0000
O	O57	1.0	0.83624	0.96691	0.85344	1.0000
O	O58	1.0	0.46385	0.96894	0.84816	1.0000
O	O59	1.0	0.62749	0.66762	0.93920	1.0000
O	O60	1.0	0.65757	0.82668	0.00696	1.0000
O	O61	1.0	0.76956	0.82379	0.92202	1.0000
O	O62	1.0	0.55884	0.86160	0.92209	1.0000
O	O63	1.0	0.65482	0.50215	0.00036	1.0000
O	O64	1.0	0.77939	0.53011	0.91865	1.0000
O	O65	1.0	0.57768	0.46936	0.90959	1.0000
O	O66	1.0	0.29226	0.64897	0.94258	1.0000
O	O67	1.0	0.16701	0.81430	0.92314	1.0000
O	O68	1.0	0.36344	0.81085	0.88980	1.0000
O	O69	1.0	0.16495	0.48193	0.93251	1.0000
O	O70	1.0	0.36543	0.46372	0.91034	1.0000
O	O71	1.0	0.03305	0.64999	0.93622	1.0000

O	O72	1.0	0.96995	0.83088	0.89418	1.0000
O	O73	1.0	0.97337	0.46360	0.90019	1.0000
O	O74	1.0	0.38020	0.32838	0.44012	1.0000
O	O75	1.0	0.34368	0.16980	0.50709	1.0000
O	O76	1.0	0.22715	0.18261	0.42422	1.0000
O	O77	1.0	0.43651	0.13156	0.42020	1.0000
O	O78	1.0	0.34915	0.49293	0.50175	1.0000
O	O79	1.0	0.22256	0.46130	0.42163	1.0000
O	O80	1.0	0.42296	0.52825	0.41077	1.0000
O	O81	1.0	0.71234	0.35508	0.44367	1.0000
O	O82	1.0	0.83096	0.18823	0.42242	1.0000
O	O83	1.0	0.63119	0.19650	0.39183	1.0000
O	O84	1.0	0.83562	0.52662	0.43445	1.0000
O	O85	1.0	0.63622	0.53684	0.40841	1.0000
O	O86	1.0	0.96131	0.35511	0.43804	1.0000
O	O87	1.0	0.02878	0.18054	0.39351	1.0000
O	O88	1.0	0.03142	0.53941	0.40291	1.0000
O	O89	1.0	0.66936	0.36471	0.69799	1.0000
O	O90	1.0	0.83242	0.32129	0.75947	1.0000
O	O91	1.0	0.83999	0.26019	0.66233	1.0000
O	O92	1.0	0.48889	0.30979	0.74586	1.0000
O	O93	1.0	0.52777	0.23879	0.65319	1.0000
O	O94	1.0	0.48425	0.44427	0.67128	1.0000
O	O95	1.0	0.66035	0.71750	0.68920	1.0000
O	O96	1.0	0.83086	0.84835	0.69396	1.0000
O	O97	1.0	0.84017	0.66538	0.64328	1.0000
O	O98	1.0	0.48854	0.83347	0.69873	1.0000
O	O99	1.0	0.47515	0.65022	0.65026	1.0000
O	O100	1.0	0.65868	0.96661	0.69593	1.0000
O	O101	1.0	0.83692	0.04705	0.65590	1.0000
O	O102	1.0	0.48016	0.01277	0.64833	1.0000
O	O103	1.0	0.33066	0.63164	0.19927	1.0000
O	O104	1.0	0.16969	0.67732	0.26037	1.0000
O	O105	1.0	0.16190	0.74234	0.16365	1.0000

O	O106	1.0	0.51164	0.68623	0.24553	1.0000
O	O107	1.0	0.46638	0.76435	0.15435	1.0000
O	O108	1.0	0.51650	0.55876	0.16854	1.0000
O	O109	1.0	0.33810	0.28287	0.19099	1.0000
O	O110	1.0	0.16850	0.15065	0.19407	1.0000
O	O111	1.0	0.15989	0.33570	0.14445	1.0000
O	O112	1.0	0.51139	0.16753	0.19808	1.0000
O	O113	1.0	0.52136	0.35135	0.15014	1.0000
O	O114	1.0	0.34150	0.03438	0.19500	1.0000
O	O115	1.0	0.16462	0.95597	0.15273	1.0000
O	O116	1.0	0.52097	0.98868	0.14773	1.0000
O	O117	1.0	0.01596	0.82307	0.99320	1.0000
O	O118	1.0	0.01072	0.48596	0.99979	1.0000
O	O119	1.0	0.98099	0.17895	0.49270	1.0000
O	O120	1.0	0.98946	0.51694	0.50192	1.0000
O	O121	1.0	0.17377	0.97624	0.25191	1.0000
O	O122	1.0	0.51391	0.98792	0.24849	1.0000
O	O123	1.0	0.82459	0.01576	0.75470	1.0000
O	O124	1.0	0.48819	0.01337	0.74930	1.0000
O	O125	1.0	0.85819	0.46393	0.68899	1.0000
O	O126	1.0	0.46614	0.86036	0.06049	1.0000
O	O127	1.0	0.17730	0.82472	0.33240	1.0000
O	O128	1.0	0.13939	0.53719	0.18944	1.0000
Al	Al1	1.0	0.46001	0.13612	0.62375	1.0000
Al	Al2	1.0	0.86371	0.53596	0.62589	1.0000
Al	Al3	1.0	0.53743	0.86434	0.12394	1.0000
Al	Al4	1.0	0.22086	0.96431	0.31250	1.0000
Al	Al5	1.0	0.13797	0.46457	0.12603	1.0000
Si	Si1	1.0	0.33894	0.54350	0.05982	1.0000
Si	Si2	1.0	0.72583	0.79016	0.05852	1.0000
Si	Si3	1.0	0.71411	0.53269	0.05356	1.0000
Si	Si4	1.0	0.96984	0.78591	0.04837	1.0000
Si	Si5	1.0	0.95714	0.52779	0.05239	1.0000
Si	Si6	1.0	0.64958	0.20672	0.54770	1.0000

Si	Si7	1.0	0.66146	0.45883	0.55979	1.0000
Si	Si8	1.0	0.27283	0.20563	0.55806	1.0000
Si	Si9	1.0	0.28751	0.46301	0.55455	1.0000
Si	Si10	1.0	0.02871	0.21345	0.54777	1.0000
Si	Si11	1.0	0.04425	0.47142	0.55368	1.0000
Si	Si12	1.0	0.20554	0.34161	0.30321	1.0000
Si	Si13	1.0	0.45553	0.34329	0.30729	1.0000
Si	Si14	1.0	0.48180	0.72132	0.30247	1.0000
Si	Si15	1.0	0.48218	0.95742	0.30630	1.0000
Si	Si16	1.0	0.14603	0.51222	0.37873	1.0000
Si	Si17	1.0	0.79409	0.65195	0.80231	1.0000
Si	Si18	1.0	0.54321	0.65621	0.80744	1.0000
Si	Si19	1.0	0.77856	0.28421	0.81341	1.0000
Si	Si20	1.0	0.52303	0.28237	0.80331	1.0000
Si	Si21	1.0	0.78107	0.04202	0.81129	1.0000
Si	Si22	1.0	0.52431	0.04253	0.80635	1.0000
Si	Si23	1.0	0.85667	0.47789	0.87612	1.0000
Si	Si24	1.0	0.65500	0.79398	0.94702	1.0000
Si	Si25	1.0	0.66004	0.54204	0.94215	1.0000
Si	Si26	1.0	0.28656	0.77617	0.93602	1.0000
Si	Si27	1.0	0.28388	0.52067	0.94808	1.0000
Si	Si28	1.0	0.04525	0.77883	0.93720	1.0000
Si	Si29	1.0	0.04502	0.52174	0.94325	1.0000
Si	Si30	1.0	0.48040	0.85296	0.87278	1.0000
Si	Si31	1.0	0.34527	0.20286	0.44693	1.0000
Si	Si32	1.0	0.34380	0.45246	0.44376	1.0000
Si	Si33	1.0	0.71236	0.22774	0.43659	1.0000
Si	Si34	1.0	0.71627	0.48351	0.44814	1.0000
Si	Si35	1.0	0.95182	0.22604	0.43708	1.0000
Si	Si36	1.0	0.95440	0.48313	0.44532	1.0000
Si	Si37	1.0	0.51909	0.14613	0.37228	1.0000
Si	Si38	1.0	0.54133	0.33697	0.69095	1.0000
Si	Si39	1.0	0.78956	0.72458	0.69055	1.0000
Si	Si40	1.0	0.53201	0.71358	0.69644	1.0000

Si	Si41	1.0	0.78696	0.96913	0.69981	1.0000
Si	Si42	1.0	0.52865	0.95734	0.69707	1.0000
Si	Si43	1.0	0.45789	0.66282	0.19056	1.0000
Si	Si44	1.0	0.20892	0.27419	0.19153	1.0000
Si	Si45	1.0	0.46659	0.28674	0.19662	1.0000
Si	Si46	1.0	0.21244	0.02882	0.19932	1.0000
Si	Si47	1.0	0.47128	0.04336	0.19658	1.0000
Si	Si48	1.0	0.15863	0.84318	0.12371	1.0000
Si	Si49	1.0	0.53134	0.46895	0.12514	1.0000
Si	Si50	1.0	0.84121	0.15765	0.62407	1.0000
Si	Si51	1.0	0.46852	0.53115	0.62655	1.0000
Si	Si52	1.0	0.14923	0.15175	0.37658	1.0000
Si	Si53	1.0	0.52896	0.53075	0.37523	1.0000
Si	Si54	1.0	0.84921	0.84671	0.87445	1.0000
Si	Si55	1.0	0.47012	0.46818	0.87535	1.0000
Si	Si56	1.0	0.79539	0.34580	0.70202	1.0000
Si	Si57	1.0	0.35020	0.79469	0.04676	1.0000
Si	Si58	1.0	0.22642	0.70586	0.31385	1.0000
Si	Si59	1.0	0.20517	0.65372	0.20190	1.0000

T1T7T7T7T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5877

_cell_length_b 12.5056

_cell_length_c 26.4266

_cell_angle_alpha 89.4008

_cell_angle_beta 89.8107

_cell_angle_gamma 90.7201

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47803	0.15133	0.53925	1.0000
H	H2	1.0	0.85659	0.52627	0.71536	1.0000
H	H3	1.0	0.09398	0.97324	0.37117	1.0000
H	H4	1.0	0.17543	0.89137	0.89746	1.0000
H	H5	1.0	0.16122	0.46921	0.21287	1.0000
O	O1	1.0	0.37439	0.67160	0.05435	1.0000
O	O2	1.0	0.32706	0.83755	0.99532	1.0000
O	O3	1.0	0.23316	0.81782	0.08498	1.0000

O	O4	1.0	0.43753	0.86948	0.07809	1.0000
O	O5	1.0	0.33234	0.49574	0.00076	1.0000
O	O6	1.0	0.22873	0.53373	0.08695	1.0000
O	O7	1.0	0.43318	0.47760	0.08570	1.0000
O	O8	1.0	0.70404	0.67362	0.06058	1.0000
O	O9	1.0	0.83879	0.84033	0.05883	1.0000
O	O10	1.0	0.64673	0.86038	0.09637	1.0000
O	O11	1.0	0.82452	0.50008	0.06056	1.0000
O	O12	1.0	0.63907	0.49522	0.10520	1.0000
O	O13	1.0	0.95795	0.66642	0.06071	1.0000
O	O14	1.0	0.02598	0.84633	0.10162	1.0000
O	O15	1.0	0.01004	0.48110	0.10455	1.0000
O	O16	1.0	0.64123	0.33416	0.55411	1.0000
O	O17	1.0	0.67026	0.16650	0.49329	1.0000
O	O18	1.0	0.74053	0.15954	0.58859	1.0000
O	O19	1.0	0.53340	0.15225	0.56643	1.0000
O	O20	1.0	0.69103	0.50957	0.50099	1.0000
O	O21	1.0	0.75818	0.48626	0.59575	1.0000
O	O22	1.0	0.55276	0.51871	0.57418	1.0000
O	O23	1.0	0.28090	0.34603	0.55809	1.0000
O	O24	1.0	0.15444	0.17239	0.56144	1.0000
O	O25	1.0	0.33571	0.17660	0.61367	1.0000
O	O26	1.0	0.16495	0.51796	0.54727	1.0000
O	O27	1.0	0.34831	0.53256	0.59544	1.0000
O	O28	1.0	0.03698	0.34375	0.55041	1.0000
O	O29	1.0	0.95368	0.17135	0.59639	1.0000
O	O30	1.0	0.98530	0.52003	0.59752	1.0000
O	O31	1.0	0.34287	0.36789	0.30198	1.0000
O	O32	1.0	0.18154	0.34022	0.23761	1.0000
O	O33	1.0	0.19325	0.21927	0.32169	1.0000
O	O34	1.0	0.14854	0.43020	0.32419	1.0000
O	O35	1.0	0.51060	0.30497	0.24830	1.0000
O	O36	1.0	0.46900	0.21622	0.33845	1.0000
O	O37	1.0	0.53720	0.41780	0.33182	1.0000

O	O38	1.0	0.35087	0.70393	0.30788	1.0000
O	O39	1.0	0.17940	0.82041	0.32294	1.0000
O	O40	1.0	0.18923	0.62491	0.35954	1.0000
O	O41	1.0	0.51467	0.83356	0.31668	1.0000
O	O42	1.0	0.53813	0.62988	0.33693	1.0000
O	O43	1.0	0.34337	0.96110	0.31881	1.0000
O	O44	1.0	0.52780	0.01824	0.35825	1.0000
O	O45	1.0	0.67508	0.64751	0.81362	1.0000
O	O46	1.0	0.82649	0.65489	0.74161	1.0000
O	O47	1.0	0.84283	0.78011	0.82021	1.0000
O	O48	1.0	0.86313	0.56668	0.83120	1.0000
O	O49	1.0	0.52013	0.64596	0.74517	1.0000
O	O50	1.0	0.51319	0.77854	0.82359	1.0000
O	O51	1.0	0.48353	0.56975	0.83581	1.0000
O	O52	1.0	0.64257	0.29772	0.81119	1.0000
O	O53	1.0	0.80760	0.17080	0.82686	1.0000
O	O54	1.0	0.81203	0.36793	0.85874	1.0000
O	O55	1.0	0.47207	0.16988	0.80937	1.0000
O	O56	1.0	0.45697	0.35928	0.84753	1.0000
O	O57	1.0	0.64124	0.04226	0.81095	1.0000
O	O58	1.0	0.81332	0.97238	0.85704	1.0000
O	O59	1.0	0.45545	0.97565	0.84595	1.0000
O	O60	1.0	0.61504	0.66948	0.94005	1.0000
O	O61	1.0	0.66827	0.83610	0.99828	1.0000
O	O62	1.0	0.77633	0.79902	0.91458	1.0000
O	O63	1.0	0.57493	0.86685	0.91082	1.0000
O	O64	1.0	0.64980	0.50769	0.00451	1.0000
O	O65	1.0	0.76424	0.52833	0.91965	1.0000
O	O66	1.0	0.55808	0.47099	0.91759	1.0000
O	O67	1.0	0.27135	0.66063	0.94660	1.0000
O	O68	1.0	0.37118	0.81701	0.89588	1.0000
O	O69	1.0	0.15776	0.48255	0.94157	1.0000
O	O70	1.0	0.34801	0.48914	0.90151	1.0000
O	O71	1.0	0.03351	0.65478	0.93614	1.0000

O	O72	1.0	0.97339	0.85745	0.89183	1.0000
O	O73	1.0	0.96391	0.46575	0.90628	1.0000
O	O74	1.0	0.38398	0.32735	0.44497	1.0000
O	O75	1.0	0.34784	0.17230	0.51456	1.0000
O	O76	1.0	0.24528	0.16800	0.42610	1.0000
O	O77	1.0	0.45470	0.13446	0.43268	1.0000
O	O78	1.0	0.34558	0.50384	0.49638	1.0000
O	O79	1.0	0.22490	0.45175	0.41745	1.0000
O	O80	1.0	0.42362	0.51735	0.40302	1.0000
O	O81	1.0	0.71133	0.34241	0.44149	1.0000
O	O82	1.0	0.83485	0.17052	0.43107	1.0000
O	O83	1.0	0.64467	0.17395	0.39247	1.0000
O	O84	1.0	0.83618	0.51103	0.42732	1.0000
O	O85	1.0	0.63525	0.52340	0.40523	1.0000
O	O86	1.0	0.96173	0.34001	0.43965	1.0000
O	O87	1.0	0.02873	0.15948	0.39791	1.0000
O	O88	1.0	0.03028	0.51768	0.39624	1.0000
O	O89	1.0	0.66513	0.38408	0.69679	1.0000
O	O90	1.0	0.82120	0.32975	0.75978	1.0000
O	O91	1.0	0.83126	0.26792	0.66307	1.0000
O	O92	1.0	0.48680	0.34224	0.74855	1.0000
O	O93	1.0	0.53603	0.23074	0.66592	1.0000
O	O94	1.0	0.47593	0.43577	0.66039	1.0000
O	O95	1.0	0.66980	0.71879	0.68233	1.0000
O	O96	1.0	0.83294	0.85319	0.69754	1.0000
O	O97	1.0	0.85808	0.67546	0.64397	1.0000
O	O98	1.0	0.49509	0.82901	0.69599	1.0000
O	O99	1.0	0.48503	0.64722	0.64666	1.0000
O	O100	1.0	0.65827	0.96949	0.69575	1.0000
O	O101	1.0	0.84014	0.05297	0.66017	1.0000
O	O102	1.0	0.47887	0.01136	0.64670	1.0000
O	O103	1.0	0.33049	0.66132	0.19018	1.0000
O	O104	1.0	0.17422	0.65772	0.25962	1.0000
O	O105	1.0	0.14017	0.73438	0.16655	1.0000

O	O106	1.0	0.50838	0.69314	0.24256	1.0000
O	O107	1.0	0.50880	0.73186	0.14493	1.0000
O	O108	1.0	0.49497	0.53315	0.17810	1.0000
O	O109	1.0	0.34680	0.27045	0.18759	1.0000
O	O110	1.0	0.17562	0.14620	0.19203	1.0000
O	O111	1.0	0.17036	0.32964	0.13871	1.0000
O	O112	1.0	0.51351	0.14461	0.18239	1.0000
O	O113	1.0	0.52990	0.33934	0.14798	1.0000
O	O114	1.0	0.34315	0.01639	0.19626	1.0000
O	O115	1.0	0.16333	0.94635	0.15799	1.0000
O	O116	1.0	0.52432	0.93855	0.16476	1.0000
O	O117	1.0	0.01364	0.83386	0.00168	1.0000
O	O118	1.0	0.99706	0.49677	0.00423	1.0000
O	O119	1.0	0.99092	0.16917	0.49803	1.0000
O	O120	1.0	0.98715	0.51370	0.49603	1.0000
O	O121	1.0	0.17743	0.98190	0.25609	1.0000
O	O122	1.0	0.50693	0.00744	0.25841	1.0000
O	O123	1.0	0.81806	0.01941	0.75782	1.0000
O	O124	1.0	0.48180	0.00699	0.74706	1.0000
O	O125	1.0	0.85828	0.47117	0.68815	1.0000
O	O126	1.0	0.15494	0.01098	0.35612	1.0000
O	O127	1.0	0.17459	0.83903	0.92509	1.0000
O	O128	1.0	0.15915	0.52591	0.18568	1.0000
Al	Al1	1.0	0.46355	0.14239	0.62968	1.0000
Al	Al2	1.0	0.86571	0.54469	0.62469	1.0000
Al	Al3	1.0	0.15744	0.15518	0.37728	1.0000
Al	Al4	1.0	0.03456	0.79085	0.94108	1.0000
Al	Al5	1.0	0.13847	0.45946	0.12187	1.0000
Si	Si1	1.0	0.34224	0.79699	0.05410	1.0000
Si	Si2	1.0	0.33973	0.54433	0.05771	1.0000
Si	Si3	1.0	0.71658	0.80179	0.05319	1.0000
Si	Si4	1.0	0.70531	0.54431	0.05746	1.0000
Si	Si5	1.0	0.95991	0.79562	0.05401	1.0000
Si	Si6	1.0	0.94935	0.53644	0.05813	1.0000

Si	Si7	1.0	0.52928	0.85059	0.12067	1.0000
Si	Si8	1.0	0.65265	0.20686	0.55062	1.0000
Si	Si9	1.0	0.66338	0.46379	0.55745	1.0000
Si	Si10	1.0	0.27689	0.21667	0.56377	1.0000
Si	Si11	1.0	0.28490	0.47463	0.54989	1.0000
Si	Si12	1.0	0.03404	0.21483	0.55183	1.0000
Si	Si13	1.0	0.04260	0.47404	0.54890	1.0000
Si	Si14	1.0	0.21668	0.33536	0.29784	1.0000
Si	Si15	1.0	0.46515	0.32624	0.30490	1.0000
Si	Si16	1.0	0.22375	0.70011	0.31269	1.0000
Si	Si17	1.0	0.47844	0.71392	0.30121	1.0000
Si	Si18	1.0	0.47326	0.95500	0.31234	1.0000
Si	Si19	1.0	0.14888	0.50455	0.37453	1.0000
Si	Si20	1.0	0.80171	0.66329	0.80260	1.0000
Si	Si21	1.0	0.54805	0.66051	0.80445	1.0000
Si	Si22	1.0	0.77035	0.29154	0.81434	1.0000
Si	Si23	1.0	0.51484	0.29215	0.80371	1.0000
Si	Si24	1.0	0.76976	0.05003	0.81285	1.0000
Si	Si25	1.0	0.51397	0.04907	0.80248	1.0000
Si	Si26	1.0	0.85063	0.48336	0.87930	1.0000
Si	Si27	1.0	0.65989	0.79271	0.94086	1.0000
Si	Si28	1.0	0.64795	0.54354	0.94530	1.0000
Si	Si29	1.0	0.27660	0.52992	0.94787	1.0000
Si	Si30	1.0	0.03717	0.52886	0.94758	1.0000
Si	Si31	1.0	0.48110	0.85849	0.86901	1.0000
Si	Si32	1.0	0.35302	0.20090	0.45359	1.0000
Si	Si33	1.0	0.34491	0.45050	0.44079	1.0000
Si	Si34	1.0	0.71630	0.21397	0.43952	1.0000
Si	Si35	1.0	0.71824	0.47144	0.44425	1.0000
Si	Si36	1.0	0.95674	0.20990	0.44145	1.0000
Si	Si37	1.0	0.95438	0.46913	0.44087	1.0000
Si	Si38	1.0	0.52369	0.13836	0.38053	1.0000
Si	Si39	1.0	0.53969	0.34570	0.69208	1.0000
Si	Si40	1.0	0.79743	0.72883	0.69003	1.0000

Si	Si41	1.0	0.54287	0.71043	0.69207	1.0000
Si	Si42	1.0	0.78578	0.97336	0.70248	1.0000
Si	Si43	1.0	0.52885	0.95488	0.69525	1.0000
Si	Si44	1.0	0.46054	0.65494	0.18890	1.0000
Si	Si45	1.0	0.21788	0.26999	0.18694	1.0000
Si	Si46	1.0	0.47494	0.26641	0.19187	1.0000
Si	Si47	1.0	0.21514	0.02433	0.19960	1.0000
Si	Si48	1.0	0.47157	0.02725	0.20002	1.0000
Si	Si49	1.0	0.14128	0.83676	0.12702	1.0000
Si	Si50	1.0	0.52424	0.46240	0.12811	1.0000
Si	Si51	1.0	0.84220	0.16271	0.62711	1.0000
Si	Si52	1.0	0.46687	0.53287	0.61955	1.0000
Si	Si53	1.0	0.53244	0.51990	0.36958	1.0000
Si	Si54	1.0	0.85403	0.85313	0.87114	1.0000
Si	Si55	1.0	0.46307	0.47284	0.87597	1.0000
Si	Si56	1.0	0.78942	0.35675	0.70180	1.0000
Si	Si57	1.0	0.21859	0.94140	0.31041	1.0000
Si	Si58	1.0	0.29358	0.78587	0.94188	1.0000
Si	Si59	1.0	0.20412	0.64928	0.20007	1.0000

T2T2T7T7T9:

data_image0
_chemical_formula_structural H5O128Al5Si59
_chemical_formula_sum "H5 O128 Al5 Si59"
_cell_length_a 12.5646
_cell_length_b 12.5411
_cell_length_c 26.4689
_cell_angle_alpha 89.9535
_cell_angle_beta 89.8241
_cell_angle_gamma 90.4393

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.48552	0.14656	0.53199	1.0000
H	H2	1.0	0.85154	0.51483	0.71753	1.0000
H	H3	1.0	0.56856	0.83765	0.34512	1.0000
H	H4	1.0	0.16667	0.43050	0.90539	1.0000
H	H5	1.0	0.06464	0.03035	0.14049	1.0000
O	O1	1.0	0.29909	0.65875	0.06051	1.0000
O	O2	1.0	0.34534	0.81912	0.99790	1.0000
O	O3	1.0	0.24066	0.85680	0.08290	1.0000

O	O4	1.0	0.44617	0.80171	0.08371	1.0000
O	O5	1.0	0.33499	0.50090	0.99501	1.0000
O	O6	1.0	0.22998	0.46296	0.07964	1.0000
O	O7	1.0	0.43953	0.50408	0.08015	1.0000
O	O8	1.0	0.69658	0.67351	0.06392	1.0000
O	O9	1.0	0.82749	0.84055	0.05248	1.0000
O	O10	1.0	0.64308	0.86572	0.09620	1.0000
O	O11	1.0	0.83540	0.51191	0.06710	1.0000
O	O12	1.0	0.64342	0.48731	0.10349	1.0000
O	O13	1.0	0.96438	0.67823	0.05636	1.0000
O	O14	1.0	0.01038	0.86459	0.09847	1.0000
O	O15	1.0	0.02721	0.50530	0.10444	1.0000
O	O16	1.0	0.64009	0.33055	0.55212	1.0000
O	O17	1.0	0.68840	0.16928	0.49047	1.0000
O	O18	1.0	0.73975	0.15716	0.58844	1.0000
O	O19	1.0	0.53885	0.14535	0.55962	1.0000
O	O20	1.0	0.67840	0.50826	0.50048	1.0000
O	O21	1.0	0.77284	0.47288	0.58999	1.0000
O	O22	1.0	0.56328	0.51436	0.58208	1.0000
O	O23	1.0	0.28338	0.32720	0.56921	1.0000
O	O24	1.0	0.15400	0.15682	0.55763	1.0000
O	O25	1.0	0.33737	0.13991	0.60637	1.0000
O	O26	1.0	0.17300	0.50098	0.55154	1.0000
O	O27	1.0	0.35475	0.51609	0.60140	1.0000
O	O28	1.0	0.04146	0.33240	0.55319	1.0000
O	O29	1.0	0.95333	0.15672	0.59163	1.0000
O	O30	1.0	0.99925	0.50053	0.60961	1.0000
O	O31	1.0	0.34227	0.37801	0.31123	1.0000
O	O32	1.0	0.17128	0.34857	0.25372	1.0000
O	O33	1.0	0.20421	0.22132	0.33224	1.0000
O	O34	1.0	0.14975	0.42602	0.34535	1.0000
O	O35	1.0	0.49567	0.32897	0.24463	1.0000
O	O36	1.0	0.48627	0.23167	0.33304	1.0000
O	O37	1.0	0.54158	0.43802	0.32678	1.0000

O	O38	1.0	0.33507	0.72606	0.31360	1.0000
O	O39	1.0	0.15276	0.82914	0.31066	1.0000
O	O40	1.0	0.16110	0.64005	0.35223	1.0000
O	O41	1.0	0.50308	0.63661	0.35675	1.0000
O	O42	1.0	0.32008	0.96250	0.31063	1.0000
O	O43	1.0	0.13534	0.02270	0.35000	1.0000
O	O44	1.0	0.51896	0.02929	0.35427	1.0000
O	O45	1.0	0.67841	0.68883	0.81214	1.0000
O	O46	1.0	0.82877	0.65696	0.74115	1.0000
O	O47	1.0	0.87352	0.75521	0.82890	1.0000
O	O48	1.0	0.83380	0.54418	0.82229	1.0000
O	O49	1.0	0.52594	0.64234	0.74609	1.0000
O	O50	1.0	0.47976	0.74542	0.83124	1.0000
O	O51	1.0	0.52990	0.54157	0.83219	1.0000
O	O52	1.0	0.65243	0.29039	0.81191	1.0000
O	O53	1.0	0.81254	0.15441	0.82644	1.0000
O	O54	1.0	0.82811	0.34969	0.85876	1.0000
O	O55	1.0	0.48692	0.15607	0.81512	1.0000
O	O56	1.0	0.46507	0.34588	0.84927	1.0000
O	O57	1.0	0.65096	0.02284	0.80629	1.0000
O	O58	1.0	0.82195	0.95449	0.85294	1.0000
O	O59	1.0	0.46276	0.95573	0.83634	1.0000
O	O60	1.0	0.62266	0.65767	0.93714	1.0000
O	O61	1.0	0.65295	0.82556	0.99714	1.0000
O	O62	1.0	0.77897	0.79658	0.91723	1.0000
O	O63	1.0	0.57518	0.85217	0.90576	1.0000
O	O64	1.0	0.66939	0.50525	0.00468	1.0000
O	O65	1.0	0.77110	0.51407	0.91721	1.0000
O	O66	1.0	0.56529	0.45675	0.92219	1.0000
O	O67	1.0	0.27704	0.66621	0.93770	1.0000
O	O68	1.0	0.17091	0.84759	0.93952	1.0000
O	O69	1.0	0.36183	0.84112	0.89986	1.0000
O	O70	1.0	0.36588	0.49706	0.89480	1.0000
O	O71	1.0	0.04082	0.67853	0.93923	1.0000

O	O72	1.0	0.97873	0.86217	0.89977	1.0000
O	O73	1.0	0.97274	0.48153	0.89393	1.0000
O	O74	1.0	0.31091	0.32142	0.43728	1.0000
O	O75	1.0	0.34188	0.17080	0.50830	1.0000
O	O76	1.0	0.24377	0.12655	0.42059	1.0000
O	O77	1.0	0.45470	0.16507	0.42715	1.0000
O	O78	1.0	0.35855	0.47214	0.50461	1.0000
O	O79	1.0	0.25324	0.52064	0.42089	1.0000
O	O80	1.0	0.45724	0.47018	0.41750	1.0000
O	O81	1.0	0.71301	0.34774	0.43812	1.0000
O	O82	1.0	0.84539	0.18498	0.42326	1.0000
O	O83	1.0	0.64976	0.17294	0.39125	1.0000
O	O84	1.0	0.84274	0.51735	0.43647	1.0000
O	O85	1.0	0.65372	0.53359	0.40060	1.0000
O	O86	1.0	0.97171	0.35028	0.44402	1.0000
O	O87	1.0	0.04538	0.18247	0.39626	1.0000
O	O88	1.0	0.04275	0.53749	0.41369	1.0000
O	O89	1.0	0.66892	0.35718	0.69765	1.0000
O	O90	1.0	0.83051	0.31124	0.75934	1.0000
O	O91	1.0	0.84323	0.25968	0.66132	1.0000
O	O92	1.0	0.49145	0.31820	0.74952	1.0000
O	O93	1.0	0.52487	0.22804	0.65871	1.0000
O	O94	1.0	0.48608	0.43755	0.66914	1.0000
O	O95	1.0	0.67159	0.71590	0.68124	1.0000
O	O96	1.0	0.84210	0.84534	0.69179	1.0000
O	O97	1.0	0.85739	0.66167	0.64283	1.0000
O	O98	1.0	0.49902	0.82789	0.69930	1.0000
O	O99	1.0	0.48262	0.64603	0.64927	1.0000
O	O100	1.0	0.66760	0.95939	0.69590	1.0000
O	O101	1.0	0.84335	0.04562	0.65725	1.0000
O	O102	1.0	0.49844	0.00018	0.64064	1.0000
O	O103	1.0	0.34428	0.69272	0.19009	1.0000
O	O104	1.0	0.18468	0.65150	0.25405	1.0000
O	O105	1.0	0.15304	0.77315	0.17438	1.0000

O	O106	1.0	0.18756	0.56163	0.16550	1.0000
O	O107	1.0	0.50039	0.66472	0.25646	1.0000
O	O108	1.0	0.53773	0.77082	0.17209	1.0000
O	O109	1.0	0.50478	0.55879	0.17201	1.0000
O	O110	1.0	0.32453	0.30384	0.18764	1.0000
O	O111	1.0	0.15741	0.17501	0.19724	1.0000
O	O112	1.0	0.13273	0.36038	0.15468	1.0000
O	O113	1.0	0.48249	0.16316	0.18149	1.0000
O	O114	1.0	0.50763	0.35616	0.14525	1.0000
O	O115	1.0	0.31795	0.03137	0.18974	1.0000
O	O116	1.0	0.49200	0.96972	0.14343	1.0000
O	O117	1.0	0.00291	0.84754	0.99861	1.0000
O	O118	1.0	0.00278	0.49998	0.00444	1.0000
O	O119	1.0	0.99287	0.16829	0.49401	1.0000
O	O120	1.0	0.98419	0.51131	0.50956	1.0000
O	O121	1.0	0.15165	0.99737	0.25159	1.0000
O	O122	1.0	0.49390	0.99567	0.24374	1.0000
O	O123	1.0	0.83154	0.00822	0.75506	1.0000
O	O124	1.0	0.49021	0.01750	0.74083	1.0000
O	O125	1.0	0.85253	0.46087	0.69000	1.0000
O	O126	1.0	0.51250	0.83104	0.31984	1.0000
O	O127	1.0	0.17119	0.48774	0.93027	1.0000
O	O128	1.0	0.12919	0.99503	0.15197	1.0000
Al	Al1	1.0	0.46855	0.12771	0.62321	1.0000
Al	Al2	1.0	0.87118	0.53013	0.62646	1.0000
Al	Al3	1.0	0.45541	0.96729	0.30468	1.0000
Al	Al4	1.0	0.03344	0.54333	0.94447	1.0000
Al	Al5	1.0	0.13524	0.85757	0.12415	1.0000
Si	Si1	1.0	0.33086	0.78632	0.05720	1.0000
Si	Si2	1.0	0.32630	0.53303	0.05496	1.0000
Si	Si3	1.0	0.70559	0.80066	0.05220	1.0000
Si	Si4	1.0	0.71276	0.54554	0.05948	1.0000
Si	Si5	1.0	0.95222	0.80703	0.05195	1.0000
Si	Si6	1.0	0.95839	0.54877	0.05648	1.0000

Si	Si7	1.0	0.52852	0.85296	0.12407	1.0000
Si	Si8	1.0	0.65821	0.20462	0.54748	1.0000
Si	Si9	1.0	0.66689	0.45872	0.55742	1.0000
Si	Si10	1.0	0.27666	0.19857	0.56182	1.0000
Si	Si11	1.0	0.29178	0.45378	0.55710	1.0000
Si	Si12	1.0	0.03537	0.20447	0.54964	1.0000
Si	Si13	1.0	0.04951	0.46181	0.55754	1.0000
Si	Si14	1.0	0.21665	0.34296	0.31113	1.0000
Si	Si15	1.0	0.46651	0.34304	0.30385	1.0000
Si	Si16	1.0	0.20632	0.71232	0.30691	1.0000
Si	Si17	1.0	0.19373	0.95251	0.30629	1.0000
Si	Si18	1.0	0.15257	0.52923	0.38271	1.0000
Si	Si19	1.0	0.80365	0.66224	0.80194	1.0000
Si	Si20	1.0	0.55334	0.65534	0.80543	1.0000
Si	Si21	1.0	0.78014	0.27630	0.81434	1.0000
Si	Si22	1.0	0.52454	0.27775	0.80548	1.0000
Si	Si23	1.0	0.77907	0.03401	0.80999	1.0000
Si	Si24	1.0	0.52371	0.03745	0.79912	1.0000
Si	Si25	1.0	0.85334	0.47311	0.87363	1.0000
Si	Si26	1.0	0.65835	0.78357	0.93921	1.0000
Si	Si27	1.0	0.65847	0.53373	0.94538	1.0000
Si	Si28	1.0	0.28753	0.79552	0.94441	1.0000
Si	Si29	1.0	0.04756	0.80544	0.94460	1.0000
Si	Si30	1.0	0.47182	0.84767	0.86880	1.0000
Si	Si31	1.0	0.33703	0.19600	0.44771	1.0000
Si	Si32	1.0	0.34450	0.44640	0.44520	1.0000
Si	Si33	1.0	0.72416	0.21951	0.43566	1.0000
Si	Si34	1.0	0.72183	0.47614	0.44490	1.0000
Si	Si35	1.0	0.96464	0.22182	0.43977	1.0000
Si	Si36	1.0	0.96093	0.47817	0.45156	1.0000
Si	Si37	1.0	0.52691	0.14802	0.37597	1.0000
Si	Si38	1.0	0.54064	0.33210	0.69270	1.0000
Si	Si39	1.0	0.80009	0.72249	0.68795	1.0000
Si	Si40	1.0	0.54530	0.70863	0.69369	1.0000

Si	Si41	1.0	0.79527	0.96459	0.69972	1.0000
Si	Si42	1.0	0.53834	0.95128	0.69275	1.0000
Si	Si43	1.0	0.21544	0.67164	0.19471	1.0000
Si	Si44	1.0	0.47059	0.67180	0.19613	1.0000
Si	Si45	1.0	0.19763	0.29898	0.19835	1.0000
Si	Si46	1.0	0.45273	0.28711	0.19000	1.0000
Si	Si47	1.0	0.44908	0.03896	0.19098	1.0000
Si	Si48	1.0	0.14307	0.47474	0.12547	1.0000
Si	Si49	1.0	0.52327	0.47738	0.12501	1.0000
Si	Si50	1.0	0.84511	0.15455	0.62474	1.0000
Si	Si51	1.0	0.47294	0.52722	0.62552	1.0000
Si	Si52	1.0	0.15724	0.13878	0.37491	1.0000
Si	Si53	1.0	0.53809	0.51762	0.37529	1.0000
Si	Si54	1.0	0.86304	0.84192	0.87494	1.0000
Si	Si55	1.0	0.48338	0.46132	0.87486	1.0000
Si	Si56	1.0	0.79481	0.34081	0.70249	1.0000
Si	Si57	1.0	0.45998	0.70673	0.31047	1.0000
Si	Si58	1.0	0.29458	0.54099	0.94056	1.0000
Si	Si59	1.0	0.19485	0.05280	0.20082	1.0000

T2T7T7T7T9:

```
data_image0
  _chemical_formula_structural      H5O128Al5Si59
  _chemical_formula_sum           "H5 O128 Al5 Si59"
  _cell_length_a          12.5936
  _cell_length_b          12.5006
  _cell_length_c          26.541
  _cell_angle_alpha       89.567
  _cell_angle_beta        90.2077
  _cell_angle_gamma       90.3716

  _space_group_name_H-M_alt    "P 1"
  _space_group_IT_number       1
```

loop_

```
  _space_group_symop_operation_xyz
    'x, y, z'
```

loop_

```
  _atom_site_type_symbol
  _atom_site_label
  _atom_site_symmetry_multiplicity
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_occupancy

  H   H1        1.0  0.48755  0.12946  0.53317  1.0000
  H   H2        1.0  0.85395  0.51724  0.71496  1.0000
  H   H3        1.0  0.58165  0.83893  0.34206  1.0000
  H   H4        1.0  0.08549  0.02276  0.13304  1.0000
  H   H5        1.0  0.15169  0.52719  0.29098  1.0000
  O   O1        1.0  0.37550  0.66371  0.05577  1.0000
  O   O2        1.0  0.33574  0.82279  0.98942  1.0000
  O   O3        1.0  0.24717  0.82432  0.08040  1.0000
```

O	O4	1.0	0.45461	0.85742	0.06740	1.0000
O	O5	1.0	0.32776	0.48664	0.00407	1.0000
O	O6	1.0	0.22388	0.53150	0.08764	1.0000
O	O7	1.0	0.42620	0.46972	0.09026	1.0000
O	O8	1.0	0.71056	0.65918	0.05948	1.0000
O	O9	1.0	0.83438	0.83256	0.05501	1.0000
O	O10	1.0	0.65026	0.83726	0.10225	1.0000
O	O11	1.0	0.83289	0.48817	0.06139	1.0000
O	O12	1.0	0.63979	0.47488	0.09557	1.0000
O	O13	1.0	0.95854	0.66146	0.05436	1.0000
O	O14	1.0	0.02389	0.84334	0.09598	1.0000
O	O15	1.0	0.02051	0.48811	0.10352	1.0000
O	O16	1.0	0.62834	0.33154	0.55325	1.0000
O	O17	1.0	0.68114	0.16994	0.49295	1.0000
O	O18	1.0	0.73762	0.16147	0.58975	1.0000
O	O19	1.0	0.53621	0.13965	0.56201	1.0000
O	O20	1.0	0.66888	0.51302	0.50289	1.0000
O	O21	1.0	0.76964	0.46702	0.58979	1.0000
O	O22	1.0	0.56319	0.51969	0.58617	1.0000
O	O23	1.0	0.28286	0.32971	0.56039	1.0000
O	O24	1.0	0.14788	0.16357	0.55848	1.0000
O	O25	1.0	0.33200	0.15066	0.60810	1.0000
O	O26	1.0	0.17018	0.50601	0.55437	1.0000
O	O27	1.0	0.35424	0.51254	0.60062	1.0000
O	O28	1.0	0.03294	0.34030	0.55863	1.0000
O	O29	1.0	0.95086	0.15754	0.59445	1.0000
O	O30	1.0	0.99056	0.52221	0.60323	1.0000
O	O31	1.0	0.33666	0.37503	0.30595	1.0000
O	O32	1.0	0.17135	0.33336	0.24450	1.0000
O	O33	1.0	0.16862	0.26168	0.33880	1.0000
O	O34	1.0	0.50423	0.30791	0.25440	1.0000
O	O35	1.0	0.46071	0.22459	0.34363	1.0000
O	O36	1.0	0.53239	0.42728	0.33432	1.0000
O	O37	1.0	0.34925	0.74244	0.30289	1.0000

O	O38	1.0	0.16991	0.84835	0.30987	1.0000
O	O39	1.0	0.19707	0.66506	0.36220	1.0000
O	O40	1.0	0.51576	0.63773	0.34548	1.0000
O	O41	1.0	0.33756	0.98095	0.30834	1.0000
O	O42	1.0	0.15170	0.04831	0.34320	1.0000
O	O43	1.0	0.54041	0.02861	0.35091	1.0000
O	O44	1.0	0.66929	0.62727	0.81313	1.0000
O	O45	1.0	0.82032	0.64914	0.74158	1.0000
O	O46	1.0	0.83132	0.76338	0.82533	1.0000
O	O47	1.0	0.86344	0.55099	0.82566	1.0000
O	O48	1.0	0.50835	0.64394	0.74866	1.0000
O	O49	1.0	0.51993	0.77338	0.82751	1.0000
O	O50	1.0	0.47262	0.56956	0.83984	1.0000
O	O51	1.0	0.65373	0.31411	0.81188	1.0000
O	O52	1.0	0.79805	0.15930	0.82606	1.0000
O	O53	1.0	0.83264	0.35218	0.85905	1.0000
O	O54	1.0	0.50639	0.16176	0.82047	1.0000
O	O55	1.0	0.45990	0.35730	0.84192	1.0000
O	O56	1.0	0.65072	0.00669	0.81372	1.0000
O	O57	1.0	0.83805	0.96377	0.85426	1.0000
O	O58	1.0	0.45571	0.96870	0.84586	1.0000
O	O59	1.0	0.62136	0.66107	0.93762	1.0000
O	O60	1.0	0.65567	0.82288	0.00192	1.0000
O	O61	1.0	0.76419	0.81229	0.91732	1.0000
O	O62	1.0	0.55558	0.85736	0.91732	1.0000
O	O63	1.0	0.66626	0.49669	0.99853	1.0000
O	O64	1.0	0.77226	0.52236	0.91418	1.0000
O	O65	1.0	0.56817	0.46159	0.91317	1.0000
O	O66	1.0	0.28478	0.64699	0.94148	1.0000
O	O67	1.0	0.16426	0.81930	0.93003	1.0000
O	O68	1.0	0.35572	0.81155	0.88970	1.0000
O	O69	1.0	0.16240	0.47598	0.94124	1.0000
O	O70	1.0	0.35613	0.46304	0.90677	1.0000
O	O71	1.0	0.03742	0.65101	0.94281	1.0000

O	O72	1.0	0.96848	0.82592	0.89637	1.0000
O	O73	1.0	0.97307	0.46918	0.90339	1.0000
O	O74	1.0	0.37438	0.31660	0.44423	1.0000
O	O75	1.0	0.33396	0.15687	0.50930	1.0000
O	O76	1.0	0.24221	0.15637	0.41859	1.0000
O	O77	1.0	0.45099	0.12357	0.43084	1.0000
O	O78	1.0	0.34834	0.48811	0.50192	1.0000
O	O79	1.0	0.23090	0.45975	0.41759	1.0000
O	O80	1.0	0.43550	0.50935	0.41430	1.0000
O	O81	1.0	0.70867	0.35170	0.44340	1.0000
O	O82	1.0	0.83670	0.18675	0.42562	1.0000
O	O83	1.0	0.63978	0.18513	0.39455	1.0000
O	O84	1.0	0.83427	0.52174	0.43960	1.0000
O	O85	1.0	0.64397	0.53483	0.40350	1.0000
O	O86	1.0	0.96672	0.35337	0.43760	1.0000
O	O87	1.0	0.03492	0.16808	0.40087	1.0000
O	O88	1.0	0.02330	0.54449	0.40287	1.0000
O	O89	1.0	0.67024	0.36339	0.69730	1.0000
O	O90	1.0	0.83133	0.31766	0.75985	1.0000
O	O91	1.0	0.84152	0.25720	0.66396	1.0000
O	O92	1.0	0.49458	0.30682	0.74674	1.0000
O	O93	1.0	0.52984	0.23549	0.65427	1.0000
O	O94	1.0	0.48375	0.44192	0.67195	1.0000
O	O95	1.0	0.65826	0.71721	0.68719	1.0000
O	O96	1.0	0.83016	0.84348	0.69609	1.0000
O	O97	1.0	0.83766	0.66347	0.64313	1.0000
O	O98	1.0	0.48738	0.83124	0.70224	1.0000
O	O99	1.0	0.47185	0.64933	0.65099	1.0000
O	O100	1.0	0.65827	0.96205	0.69755	1.0000
O	O101	1.0	0.83589	0.04258	0.65787	1.0000
O	O102	1.0	0.48306	0.00799	0.64796	1.0000
O	O103	1.0	0.33449	0.64285	0.19373	1.0000
O	O104	1.0	0.17983	0.65496	0.26324	1.0000
O	O105	1.0	0.16858	0.77323	0.17898	1.0000

O	O106	1.0	0.14330	0.55885	0.17889	1.0000
O	O107	1.0	0.51032	0.67977	0.24684	1.0000
O	O108	1.0	0.48175	0.78261	0.16060	1.0000
O	O109	1.0	0.52413	0.57536	0.16318	1.0000
O	O110	1.0	0.34378	0.32045	0.18966	1.0000
O	O111	1.0	0.19119	0.17169	0.18052	1.0000
O	O112	1.0	0.16091	0.36267	0.14446	1.0000
O	O113	1.0	0.48590	0.16640	0.18032	1.0000
O	O114	1.0	0.53804	0.36385	0.15982	1.0000
O	O115	1.0	0.33822	0.01401	0.18223	1.0000
O	O116	1.0	0.52622	0.98356	0.14022	1.0000
O	O117	1.0	0.00384	0.82723	0.99559	1.0000
O	O118	1.0	0.00121	0.48498	0.00330	1.0000
O	O119	1.0	0.98237	0.18078	0.49731	1.0000
O	O120	1.0	0.99368	0.51208	0.50252	1.0000
O	O121	1.0	0.17270	0.01204	0.24637	1.0000
O	O122	1.0	0.51133	0.99669	0.24049	1.0000
O	O123	1.0	0.82298	0.01251	0.75590	1.0000
O	O124	1.0	0.48862	0.01709	0.74857	1.0000
O	O125	1.0	0.85638	0.46202	0.68801	1.0000
O	O126	1.0	0.52922	0.83546	0.31495	1.0000
O	O127	1.0	0.14630	0.98387	0.14661	1.0000
O	O128	1.0	0.15119	0.47047	0.31797	1.0000
Al	Al1	1.0	0.46265	0.13350	0.62464	1.0000
Al	Al2	1.0	0.86391	0.53499	0.62450	1.0000
Al	Al3	1.0	0.47263	0.97231	0.30139	1.0000
Al	Al4	1.0	0.14799	0.84149	0.12304	1.0000
Al	Al5	1.0	0.15072	0.54137	0.38188	1.0000
Si	Si1	1.0	0.34955	0.79212	0.04880	1.0000
Si	Si2	1.0	0.33852	0.53923	0.05948	1.0000
Si	Si3	1.0	0.71337	0.78833	0.05442	1.0000
Si	Si4	1.0	0.71278	0.53087	0.05323	1.0000
Si	Si5	1.0	0.95675	0.79178	0.05072	1.0000
Si	Si6	1.0	0.95355	0.53235	0.05531	1.0000

Si	Si7	1.0	0.52842	0.86383	0.11729	1.0000
Si	Si8	1.0	0.65212	0.20569	0.54973	1.0000
Si	Si9	1.0	0.66043	0.45915	0.55907	1.0000
Si	Si10	1.0	0.27209	0.20039	0.56060	1.0000
Si	Si11	1.0	0.28871	0.45871	0.55474	1.0000
Si	Si12	1.0	0.02904	0.21224	0.55259	1.0000
Si	Si13	1.0	0.04576	0.47057	0.55533	1.0000
Si	Si14	1.0	0.45962	0.33307	0.31018	1.0000
Si	Si15	1.0	0.22106	0.72932	0.31161	1.0000
Si	Si16	1.0	0.21146	0.97192	0.30297	1.0000
Si	Si17	1.0	0.79481	0.64947	0.80211	1.0000
Si	Si18	1.0	0.54259	0.65361	0.80726	1.0000
Si	Si19	1.0	0.77842	0.28435	0.81414	1.0000
Si	Si20	1.0	0.52867	0.28451	0.80457	1.0000
Si	Si21	1.0	0.77682	0.03492	0.81199	1.0000
Si	Si22	1.0	0.52585	0.03820	0.80614	1.0000
Si	Si23	1.0	0.85912	0.47375	0.87565	1.0000
Si	Si24	1.0	0.64975	0.78840	0.94323	1.0000
Si	Si25	1.0	0.65690	0.53588	0.94037	1.0000
Si	Si26	1.0	0.28487	0.77609	0.93778	1.0000
Si	Si27	1.0	0.28306	0.51880	0.94839	1.0000
Si	Si28	1.0	0.04312	0.78091	0.94167	1.0000
Si	Si29	1.0	0.04337	0.52194	0.94794	1.0000
Si	Si30	1.0	0.47141	0.85119	0.87057	1.0000
Si	Si31	1.0	0.34762	0.18999	0.45012	1.0000
Si	Si32	1.0	0.34367	0.44361	0.44464	1.0000
Si	Si33	1.0	0.71742	0.22384	0.43916	1.0000
Si	Si34	1.0	0.71465	0.48062	0.44811	1.0000
Si	Si35	1.0	0.95649	0.22461	0.44090	1.0000
Si	Si36	1.0	0.95697	0.48313	0.44556	1.0000
Si	Si37	1.0	0.52369	0.13862	0.38000	1.0000
Si	Si38	1.0	0.54303	0.33455	0.69139	1.0000
Si	Si39	1.0	0.78673	0.72104	0.69034	1.0000
Si	Si40	1.0	0.53135	0.71086	0.69670	1.0000

Si	Si41	1.0	0.78589	0.96490	0.70145	1.0000
Si	Si42	1.0	0.52880	0.95480	0.69805	1.0000
Si	Si43	1.0	0.20683	0.66158	0.20207	1.0000
Si	Si44	1.0	0.46059	0.67080	0.18983	1.0000
Si	Si45	1.0	0.21758	0.29766	0.18972	1.0000
Si	Si46	1.0	0.46828	0.28854	0.19633	1.0000
Si	Si47	1.0	0.46737	0.03886	0.18744	1.0000
Si	Si48	1.0	0.13796	0.48636	0.12808	1.0000
Si	Si49	1.0	0.53043	0.47225	0.12652	1.0000
Si	Si50	1.0	0.84197	0.15402	0.62646	1.0000
Si	Si51	1.0	0.46880	0.52983	0.62717	1.0000
Si	Si52	1.0	0.15045	0.15759	0.37568	1.0000
Si	Si53	1.0	0.53129	0.52408	0.37517	1.0000
Si	Si54	1.0	0.85001	0.84117	0.87368	1.0000
Si	Si55	1.0	0.46556	0.46386	0.87553	1.0000
Si	Si56	1.0	0.79576	0.34407	0.70239	1.0000
Si	Si57	1.0	0.47288	0.71496	0.30207	1.0000
Si	Si58	1.0	0.21757	0.04769	0.19222	1.0000
Si	Si59	1.0	0.20986	0.35432	0.30196	1.0000

T2T7T7T9T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5675

_cell_length_b 12.5092

_cell_length_c 26.5268

_cell_angle_alpha 90.1438

_cell_angle_beta 89.9847

_cell_angle_gamma 90.4184

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48820	0.14108	0.53060	1.0000
H	H2	1.0	0.85059	0.52347	0.71375	1.0000
H	H3	1.0	0.56905	0.83642	0.34306	1.0000
H	H4	1.0	0.06334	0.02444	0.14015	1.0000
H	H5	1.0	0.90721	0.02549	0.87047	1.0000
O	O1	1.0	0.29524	0.66569	0.06191	1.0000
O	O2	1.0	0.35749	0.81008	0.99323	1.0000
O	O3	1.0	0.24518	0.86912	0.07424	1.0000

O	O4	1.0	0.44843	0.80615	0.08157	1.0000
O	O5	1.0	0.33942	0.50318	0.00006	1.0000
O	O6	1.0	0.23171	0.46868	0.08377	1.0000
O	O7	1.0	0.43794	0.51733	0.08656	1.0000
O	O8	1.0	0.69941	0.66041	0.06618	1.0000
O	O9	1.0	0.83013	0.82883	0.05815	1.0000
O	O10	1.0	0.64698	0.84792	0.10501	1.0000
O	O11	1.0	0.83061	0.49408	0.06065	1.0000
O	O12	1.0	0.64097	0.46800	0.09669	1.0000
O	O13	1.0	0.96173	0.66285	0.05625	1.0000
O	O14	1.0	0.02048	0.84510	0.09904	1.0000
O	O15	1.0	0.02129	0.47999	0.09778	1.0000
O	O16	1.0	0.63641	0.33119	0.55129	1.0000
O	O17	1.0	0.69081	0.17029	0.49050	1.0000
O	O18	1.0	0.74005	0.15974	0.58856	1.0000
O	O19	1.0	0.54050	0.14163	0.55856	1.0000
O	O20	1.0	0.67537	0.50908	0.50010	1.0000
O	O21	1.0	0.77546	0.47041	0.58751	1.0000
O	O22	1.0	0.56687	0.51780	0.58384	1.0000
O	O23	1.0	0.28549	0.32832	0.56871	1.0000
O	O24	1.0	0.15311	0.16103	0.55748	1.0000
O	O25	1.0	0.33759	0.14020	0.60528	1.0000
O	O26	1.0	0.17508	0.50251	0.55197	1.0000
O	O27	1.0	0.35799	0.51640	0.60136	1.0000
O	O28	1.0	0.03809	0.33721	0.55540	1.0000
O	O29	1.0	0.95354	0.15670	0.59118	1.0000
O	O30	1.0	0.99907	0.51424	0.60701	1.0000
O	O31	1.0	0.34158	0.37721	0.31122	1.0000
O	O32	1.0	0.16899	0.34598	0.25449	1.0000
O	O33	1.0	0.20513	0.21941	0.33234	1.0000
O	O34	1.0	0.14883	0.42333	0.34591	1.0000
O	O35	1.0	0.49593	0.32893	0.24509	1.0000
O	O36	1.0	0.48713	0.23220	0.33350	1.0000
O	O37	1.0	0.54029	0.43937	0.32694	1.0000

O	O38	1.0	0.33390	0.72667	0.30930	1.0000
O	O39	1.0	0.15090	0.82878	0.31075	1.0000
O	O40	1.0	0.16482	0.63717	0.34972	1.0000
O	O41	1.0	0.49766	0.63760	0.35780	1.0000
O	O42	1.0	0.31859	0.96253	0.31002	1.0000
O	O43	1.0	0.13332	0.02230	0.34874	1.0000
O	O44	1.0	0.51740	0.02863	0.35410	1.0000
O	O45	1.0	0.67045	0.63486	0.81036	1.0000
O	O46	1.0	0.82363	0.64905	0.73872	1.0000
O	O47	1.0	0.83322	0.77234	0.82040	1.0000
O	O48	1.0	0.86139	0.55776	0.82415	1.0000
O	O49	1.0	0.51010	0.65126	0.74717	1.0000
O	O50	1.0	0.51511	0.77453	0.82912	1.0000
O	O51	1.0	0.47654	0.56755	0.83641	1.0000
O	O52	1.0	0.65966	0.32798	0.80976	1.0000
O	O53	1.0	0.79910	0.16854	0.82363	1.0000
O	O54	1.0	0.84116	0.35943	0.85734	1.0000
O	O55	1.0	0.52674	0.16508	0.81912	1.0000
O	O56	1.0	0.46345	0.35614	0.84155	1.0000
O	O57	1.0	0.66171	0.00295	0.81272	1.0000
O	O58	1.0	0.46621	0.97449	0.84594	1.0000
O	O59	1.0	0.62040	0.66475	0.93675	1.0000
O	O60	1.0	0.64931	0.82026	0.00539	1.0000
O	O61	1.0	0.76798	0.81616	0.92263	1.0000
O	O62	1.0	0.56108	0.86265	0.91824	1.0000
O	O63	1.0	0.66409	0.50416	0.99902	1.0000
O	O64	1.0	0.77332	0.52474	0.91442	1.0000
O	O65	1.0	0.56919	0.46538	0.91237	1.0000
O	O66	1.0	0.28944	0.65417	0.93325	1.0000
O	O67	1.0	0.17516	0.83099	0.94284	1.0000
O	O68	1.0	0.35759	0.83133	0.89330	1.0000
O	O69	1.0	0.16525	0.48470	0.94245	1.0000
O	O70	1.0	0.35587	0.46561	0.90347	1.0000
O	O71	1.0	0.04572	0.66204	0.94398	1.0000

O	O72	1.0	0.98806	0.84247	0.89865	1.0000
O	O73	1.0	0.97867	0.48496	0.89946	1.0000
O	O74	1.0	0.30918	0.32096	0.43729	1.0000
O	O75	1.0	0.34047	0.17003	0.50766	1.0000
O	O76	1.0	0.24437	0.12429	0.41994	1.0000
O	O77	1.0	0.45460	0.16528	0.42713	1.0000
O	O78	1.0	0.35888	0.47332	0.50431	1.0000
O	O79	1.0	0.25002	0.52033	0.42149	1.0000
O	O80	1.0	0.45499	0.46963	0.41724	1.0000
O	O81	1.0	0.71141	0.34850	0.43747	1.0000
O	O82	1.0	0.84599	0.18720	0.42281	1.0000
O	O83	1.0	0.64976	0.17092	0.39172	1.0000
O	O84	1.0	0.84118	0.51838	0.43699	1.0000
O	O85	1.0	0.65141	0.53535	0.40083	1.0000
O	O86	1.0	0.97367	0.35318	0.44200	1.0000
O	O87	1.0	0.04618	0.18164	0.39663	1.0000
O	O88	1.0	0.03992	0.54156	0.41096	1.0000
O	O89	1.0	0.67385	0.36086	0.69591	1.0000
O	O90	1.0	0.83788	0.32132	0.75747	1.0000
O	O91	1.0	0.84704	0.26017	0.66135	1.0000
O	O92	1.0	0.49836	0.30797	0.74565	1.0000
O	O93	1.0	0.52806	0.24059	0.65159	1.0000
O	O94	1.0	0.49060	0.44716	0.67181	1.0000
O	O95	1.0	0.66462	0.72299	0.68570	1.0000
O	O96	1.0	0.84008	0.84535	0.69452	1.0000
O	O97	1.0	0.84384	0.66621	0.64039	1.0000
O	O98	1.0	0.49325	0.83608	0.70007	1.0000
O	O99	1.0	0.48041	0.65306	0.64887	1.0000
O	O100	1.0	0.66804	0.96341	0.69868	1.0000
O	O101	1.0	0.84272	0.04527	0.65666	1.0000
O	O102	1.0	0.49785	0.01166	0.64657	1.0000
O	O103	1.0	0.34482	0.64088	0.18995	1.0000
O	O104	1.0	0.17812	0.65645	0.25112	1.0000
O	O105	1.0	0.19201	0.78321	0.17095	1.0000

O	O106	1.0	0.15292	0.57323	0.16252	1.0000
O	O107	1.0	0.50186	0.65752	0.25754	1.0000
O	O108	1.0	0.51324	0.77137	0.17513	1.0000
O	O109	1.0	0.53560	0.55836	0.17267	1.0000
O	O110	1.0	0.32321	0.30035	0.18978	1.0000
O	O111	1.0	0.15569	0.17257	0.19667	1.0000
O	O112	1.0	0.13343	0.36129	0.15637	1.0000
O	O113	1.0	0.48344	0.16287	0.18174	1.0000
O	O114	1.0	0.50202	0.35611	0.14570	1.0000
O	O115	1.0	0.31868	0.03088	0.18861	1.0000
O	O116	1.0	0.49596	0.97013	0.14348	1.0000
O	O117	1.0	0.00029	0.83264	0.99905	1.0000
O	O118	1.0	0.99395	0.49173	0.99893	1.0000
O	O119	1.0	0.99228	0.17403	0.49411	1.0000
O	O120	1.0	0.98902	0.51453	0.50727	1.0000
O	O121	1.0	0.15136	0.99461	0.24996	1.0000
O	O122	1.0	0.49314	0.99589	0.24382	1.0000
O	O123	1.0	0.83516	0.01641	0.75458	1.0000
O	O124	1.0	0.49796	0.02039	0.74805	1.0000
O	O125	1.0	0.85626	0.46643	0.68695	1.0000
O	O126	1.0	0.51112	0.82985	0.31873	1.0000
O	O127	1.0	0.13115	0.99294	0.14975	1.0000
O	O128	1.0	0.85184	0.98185	0.85457	1.0000
Al	Al1	1.0	0.46916	0.13338	0.62206	1.0000
Al	Al2	1.0	0.86949	0.53585	0.62381	1.0000
Al	Al3	1.0	0.45393	0.96678	0.30425	1.0000
Al	Al4	1.0	0.14920	0.85736	0.12018	1.0000
Al	Al5	1.0	0.85999	0.83785	0.87626	1.0000
Si	Si1	1.0	0.33495	0.79052	0.05311	1.0000
Si	Si2	1.0	0.32634	0.53972	0.05839	1.0000
Si	Si3	1.0	0.70721	0.78932	0.05812	1.0000
Si	Si4	1.0	0.70894	0.53336	0.05494	1.0000
Si	Si5	1.0	0.95415	0.79292	0.05341	1.0000
Si	Si6	1.0	0.95225	0.53429	0.05328	1.0000

Si	Si7	1.0	0.52541	0.84939	0.12604	1.0000
Si	Si8	1.0	0.65828	0.20529	0.54716	1.0000
Si	Si9	1.0	0.66633	0.45914	0.55687	1.0000
Si	Si10	1.0	0.27675	0.19972	0.56106	1.0000
Si	Si11	1.0	0.29382	0.45509	0.55705	1.0000
Si	Si12	1.0	0.03437	0.20889	0.54995	1.0000
Si	Si13	1.0	0.05039	0.46740	0.55675	1.0000
Si	Si14	1.0	0.21628	0.34117	0.31142	1.0000
Si	Si15	1.0	0.46622	0.34313	0.30410	1.0000
Si	Si16	1.0	0.20481	0.71236	0.30460	1.0000
Si	Si17	1.0	0.19231	0.95203	0.30519	1.0000
Si	Si18	1.0	0.15165	0.52905	0.38182	1.0000
Si	Si19	1.0	0.79650	0.65766	0.79976	1.0000
Si	Si20	1.0	0.54331	0.65779	0.80627	1.0000
Si	Si21	1.0	0.78358	0.29542	0.81215	1.0000
Si	Si22	1.0	0.53611	0.28915	0.80324	1.0000
Si	Si23	1.0	0.53643	0.03999	0.80558	1.0000
Si	Si24	1.0	0.86186	0.48330	0.87447	1.0000
Si	Si25	1.0	0.65260	0.79136	0.94548	1.0000
Si	Si26	1.0	0.65690	0.54064	0.94051	1.0000
Si	Si27	1.0	0.29421	0.78246	0.94124	1.0000
Si	Si28	1.0	0.28699	0.52795	0.94529	1.0000
Si	Si29	1.0	0.05101	0.79259	0.94571	1.0000
Si	Si30	1.0	0.04617	0.53316	0.94648	1.0000
Si	Si31	1.0	0.47567	0.85794	0.87248	1.0000
Si	Si32	1.0	0.33646	0.19530	0.44730	1.0000
Si	Si33	1.0	0.34265	0.44644	0.44516	1.0000
Si	Si34	1.0	0.72449	0.22003	0.43549	1.0000
Si	Si35	1.0	0.72003	0.47721	0.44477	1.0000
Si	Si36	1.0	0.96534	0.22432	0.43920	1.0000
Si	Si37	1.0	0.96127	0.48112	0.44988	1.0000
Si	Si38	1.0	0.52666	0.14748	0.37609	1.0000
Si	Si39	1.0	0.54560	0.33699	0.69013	1.0000
Si	Si40	1.0	0.79351	0.72342	0.68842	1.0000

Si	Si41	1.0	0.53732	0.71545	0.69537	1.0000
Si	Si42	1.0	0.79570	0.96633	0.70010	1.0000
Si	Si43	1.0	0.53824	0.95801	0.69715	1.0000
Si	Si44	1.0	0.21693	0.66671	0.19240	1.0000
Si	Si45	1.0	0.47202	0.65785	0.19719	1.0000
Si	Si46	1.0	0.19630	0.29664	0.19926	1.0000
Si	Si47	1.0	0.45151	0.28623	0.19081	1.0000
Si	Si48	1.0	0.44996	0.03842	0.19073	1.0000
Si	Si49	1.0	0.13579	0.47279	0.12491	1.0000
Si	Si50	1.0	0.52784	0.47526	0.12525	1.0000
Si	Si51	1.0	0.84591	0.15519	0.62443	1.0000
Si	Si52	1.0	0.47496	0.53236	0.62630	1.0000
Si	Si53	1.0	0.15716	0.13736	0.37463	1.0000
Si	Si54	1.0	0.53553	0.51863	0.37559	1.0000
Si	Si55	1.0	0.46791	0.46576	0.87398	1.0000
Si	Si56	1.0	0.80010	0.34681	0.70033	1.0000
Si	Si57	1.0	0.45854	0.70509	0.30984	1.0000
Si	Si58	1.0	0.19517	0.05033	0.19948	1.0000
Si	Si59	1.0	0.78256	0.04476	0.80841	1.0000

T7T7T7T7T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5743

_cell_length_b 12.5409

_cell_length_c 26.4602

_cell_angle_alpha 90.2481

_cell_angle_beta 89.7222

_cell_angle_gamma 90.86

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48144	0.13462	0.53259	1.0000
H	H2	1.0	0.85351	0.52484	0.71320	1.0000
H	H3	1.0	0.52546	0.85544	0.03561	1.0000
H	H4	1.0	0.13385	0.48529	0.21722	1.0000
H	H5	1.0	0.90343	0.02333	0.86972	1.0000
O	O1	1.0	0.37274	0.66841	0.05220	1.0000
O	O2	1.0	0.33391	0.83031	0.99014	1.0000
O	O3	1.0	0.26230	0.83780	0.08581	1.0000

O	O4	1.0	0.31057	0.48832	0.00565	1.0000
O	O5	1.0	0.24198	0.53366	0.09819	1.0000
O	O6	1.0	0.44504	0.48098	0.07952	1.0000
O	O7	1.0	0.72231	0.65751	0.05702	1.0000
O	O8	1.0	0.84913	0.82967	0.05653	1.0000
O	O9	1.0	0.66763	0.82972	0.10948	1.0000
O	O10	1.0	0.83635	0.48423	0.05319	1.0000
O	O11	1.0	0.65073	0.47804	0.09964	1.0000
O	O12	1.0	0.96708	0.65699	0.05320	1.0000
O	O13	1.0	0.04863	0.83473	0.09318	1.0000
O	O14	1.0	0.01828	0.47867	0.09943	1.0000
O	O15	1.0	0.62569	0.32831	0.55122	1.0000
O	O16	1.0	0.67543	0.16746	0.48947	1.0000
O	O17	1.0	0.73752	0.16119	0.58630	1.0000
O	O18	1.0	0.53409	0.13647	0.56047	1.0000
O	O19	1.0	0.67502	0.51052	0.50458	1.0000
O	O20	1.0	0.76893	0.45912	0.59103	1.0000
O	O21	1.0	0.56361	0.51470	0.58721	1.0000
O	O22	1.0	0.28179	0.33748	0.56031	1.0000
O	O23	1.0	0.14997	0.16904	0.55453	1.0000
O	O24	1.0	0.33161	0.15665	0.60534	1.0000
O	O25	1.0	0.16974	0.51203	0.55370	1.0000
O	O26	1.0	0.35412	0.51872	0.60051	1.0000
O	O27	1.0	0.03404	0.34337	0.55404	1.0000
O	O28	1.0	0.95114	0.16411	0.59188	1.0000
O	O29	1.0	0.98811	0.52450	0.60103	1.0000
O	O30	1.0	0.33404	0.37855	0.30968	1.0000
O	O31	1.0	0.17404	0.34254	0.24350	1.0000
O	O32	1.0	0.18194	0.23536	0.32944	1.0000
O	O33	1.0	0.13960	0.44454	0.32779	1.0000
O	O34	1.0	0.49916	0.34680	0.24867	1.0000
O	O35	1.0	0.46997	0.22563	0.33096	1.0000
O	O36	1.0	0.53181	0.42788	0.33837	1.0000
O	O37	1.0	0.34800	0.70382	0.30878	1.0000

O	O38	1.0	0.18705	0.83670	0.32600	1.0000
O	O39	1.0	0.18055	0.64166	0.35965	1.0000
O	O40	1.0	0.51112	0.83707	0.31621	1.0000
O	O41	1.0	0.53459	0.64094	0.34322	1.0000
O	O42	1.0	0.34824	0.97496	0.31390	1.0000
O	O43	1.0	0.16177	0.03352	0.35208	1.0000
O	O44	1.0	0.53698	0.03021	0.34780	1.0000
O	O45	1.0	0.66738	0.61778	0.80627	1.0000
O	O46	1.0	0.82539	0.65120	0.73826	1.0000
O	O47	1.0	0.81328	0.77327	0.82012	1.0000
O	O48	1.0	0.86394	0.56424	0.82578	1.0000
O	O49	1.0	0.49764	0.65826	0.75086	1.0000
O	O50	1.0	0.53933	0.77564	0.83338	1.0000
O	O51	1.0	0.47097	0.57574	0.84077	1.0000
O	O52	1.0	0.65297	0.29691	0.80801	1.0000
O	O53	1.0	0.81835	0.17132	0.82279	1.0000
O	O54	1.0	0.81949	0.36731	0.85766	1.0000
O	O55	1.0	0.49288	0.16323	0.82102	1.0000
O	O56	1.0	0.46537	0.36404	0.84038	1.0000
O	O57	1.0	0.65708	0.02757	0.81611	1.0000
O	O58	1.0	0.46960	0.96914	0.85119	1.0000
O	O59	1.0	0.62111	0.66542	0.94359	1.0000
O	O60	1.0	0.65407	0.82637	0.01058	1.0000
O	O61	1.0	0.76333	0.82174	0.92440	1.0000
O	O62	1.0	0.55416	0.85938	0.92640	1.0000
O	O63	1.0	0.65984	0.49486	0.99964	1.0000
O	O64	1.0	0.77822	0.53663	0.91732	1.0000
O	O65	1.0	0.57917	0.46833	0.90929	1.0000
O	O66	1.0	0.29363	0.64931	0.94284	1.0000
O	O67	1.0	0.17186	0.81949	0.92744	1.0000
O	O68	1.0	0.36378	0.81054	0.88972	1.0000
O	O69	1.0	0.16624	0.48220	0.93185	1.0000
O	O70	1.0	0.36709	0.46364	0.91056	1.0000
O	O71	1.0	0.03986	0.65365	0.93760	1.0000

O	O72	1.0	0.97862	0.83584	0.89520	1.0000
O	O73	1.0	0.97401	0.47120	0.89886	1.0000
O	O74	1.0	0.36945	0.33104	0.43836	1.0000
O	O75	1.0	0.34247	0.17249	0.50663	1.0000
O	O76	1.0	0.23166	0.17102	0.42221	1.0000
O	O77	1.0	0.44304	0.13862	0.42196	1.0000
O	O78	1.0	0.34777	0.49530	0.50097	1.0000
O	O79	1.0	0.22217	0.47452	0.41976	1.0000
O	O80	1.0	0.42629	0.52816	0.41073	1.0000
O	O81	1.0	0.70968	0.34982	0.44266	1.0000
O	O82	1.0	0.83449	0.18373	0.42365	1.0000
O	O83	1.0	0.63858	0.18694	0.39023	1.0000
O	O84	1.0	0.83489	0.51955	0.43710	1.0000
O	O85	1.0	0.63919	0.53457	0.40781	1.0000
O	O86	1.0	0.96466	0.35045	0.43708	1.0000
O	O87	1.0	0.03176	0.17077	0.39479	1.0000
O	O88	1.0	0.02583	0.53558	0.40067	1.0000
O	O89	1.0	0.66780	0.37062	0.69724	1.0000
O	O90	1.0	0.83181	0.32940	0.75769	1.0000
O	O91	1.0	0.83640	0.26070	0.66220	1.0000
O	O92	1.0	0.49159	0.30400	0.74537	1.0000
O	O93	1.0	0.53080	0.24175	0.65137	1.0000
O	O94	1.0	0.47838	0.44396	0.67320	1.0000
O	O95	1.0	0.65743	0.72119	0.69141	1.0000
O	O96	1.0	0.82995	0.84705	0.69239	1.0000
O	O97	1.0	0.82949	0.66548	0.63925	1.0000
O	O98	1.0	0.48580	0.83612	0.69814	1.0000
O	O99	1.0	0.47542	0.65012	0.65145	1.0000
O	O100	1.0	0.65836	0.96724	0.69523	1.0000
O	O101	1.0	0.83680	0.04716	0.65524	1.0000
O	O102	1.0	0.47796	0.01787	0.65127	1.0000
O	O103	1.0	0.32968	0.62763	0.19936	1.0000
O	O104	1.0	0.16753	0.67857	0.25976	1.0000
O	O105	1.0	0.16489	0.74033	0.16275	1.0000

O	O106	1.0	0.50998	0.68091	0.24648	1.0000
O	O107	1.0	0.46327	0.76547	0.15739	1.0000
O	O108	1.0	0.51636	0.55926	0.16706	1.0000
O	O109	1.0	0.33969	0.28263	0.19028	1.0000
O	O110	1.0	0.17106	0.15104	0.19491	1.0000
O	O111	1.0	0.16014	0.33380	0.14459	1.0000
O	O112	1.0	0.51219	0.16743	0.19673	1.0000
O	O113	1.0	0.52169	0.35131	0.14918	1.0000
O	O114	1.0	0.34363	0.03261	0.19360	1.0000
O	O115	1.0	0.16385	0.95342	0.15534	1.0000
O	O116	1.0	0.52618	0.98638	0.14849	1.0000
O	O117	1.0	0.01601	0.82477	0.99510	1.0000
O	O118	1.0	0.01053	0.48666	0.99840	1.0000
O	O119	1.0	0.98433	0.17842	0.49378	1.0000
O	O120	1.0	0.99506	0.51464	0.50017	1.0000
O	O121	1.0	0.17980	0.98191	0.25379	1.0000
O	O122	1.0	0.51130	0.99041	0.24909	1.0000
O	O123	1.0	0.82424	0.01538	0.75333	1.0000
O	O124	1.0	0.49353	0.01192	0.75216	1.0000
O	O125	1.0	0.85638	0.46800	0.68626	1.0000
O	O126	1.0	0.46936	0.85722	0.06270	1.0000
O	O127	1.0	0.13772	0.53700	0.18906	1.0000
O	O128	1.0	0.84718	0.98142	0.85331	1.0000
Al	Al1	1.0	0.46096	0.13830	0.62359	1.0000
Al	Al2	1.0	0.86129	0.53675	0.62279	1.0000
Al	Al3	1.0	0.53890	0.85985	0.12590	1.0000
Al	Al4	1.0	0.13946	0.46301	0.12610	1.0000
Al	Al5	1.0	0.84979	0.83811	0.87491	1.0000
Si	Si1	1.0	0.34027	0.54199	0.05996	1.0000
Si	Si2	1.0	0.72617	0.78653	0.06010	1.0000
Si	Si3	1.0	0.71696	0.52889	0.05286	1.0000
Si	Si4	1.0	0.96989	0.78551	0.04960	1.0000
Si	Si5	1.0	0.95911	0.52689	0.05196	1.0000
Si	Si6	1.0	0.64985	0.20306	0.54710	1.0000

Si	Si7	1.0	0.66070	0.45426	0.55955	1.0000
Si	Si8	1.0	0.27390	0.20850	0.55820	1.0000
Si	Si9	1.0	0.28846	0.46576	0.55425	1.0000
Si	Si10	1.0	0.03022	0.21512	0.54880	1.0000
Si	Si11	1.0	0.04577	0.47355	0.55320	1.0000
Si	Si12	1.0	0.20830	0.34867	0.30300	1.0000
Si	Si13	1.0	0.45894	0.34421	0.30678	1.0000
Si	Si14	1.0	0.22104	0.71561	0.31355	1.0000
Si	Si15	1.0	0.47593	0.71575	0.30314	1.0000
Si	Si16	1.0	0.22011	0.95801	0.31084	1.0000
Si	Si17	1.0	0.47560	0.95827	0.30570	1.0000
Si	Si18	1.0	0.14359	0.52360	0.37714	1.0000
Si	Si19	1.0	0.79205	0.65528	0.79891	1.0000
Si	Si20	1.0	0.54405	0.65720	0.80790	1.0000
Si	Si21	1.0	0.78010	0.29314	0.81172	1.0000
Si	Si22	1.0	0.52501	0.28281	0.80332	1.0000
Si	Si23	1.0	0.52777	0.04219	0.80912	1.0000
Si	Si24	1.0	0.85765	0.48628	0.87505	1.0000
Si	Si25	1.0	0.65226	0.79233	0.95021	1.0000
Si	Si26	1.0	0.65973	0.54178	0.94268	1.0000
Si	Si27	1.0	0.29004	0.77700	0.93743	1.0000
Si	Si28	1.0	0.28451	0.52110	0.94805	1.0000
Si	Si29	1.0	0.04898	0.78338	0.93856	1.0000
Si	Si30	1.0	0.04721	0.52524	0.94266	1.0000
Si	Si31	1.0	0.48236	0.85174	0.87540	1.0000
Si	Si32	1.0	0.34510	0.20436	0.44662	1.0000
Si	Si33	1.0	0.34096	0.45758	0.44244	1.0000
Si	Si34	1.0	0.71494	0.22229	0.43621	1.0000
Si	Si35	1.0	0.71466	0.47851	0.44828	1.0000
Si	Si36	1.0	0.95506	0.22149	0.43771	1.0000
Si	Si37	1.0	0.95528	0.47886	0.44462	1.0000
Si	Si38	1.0	0.52181	0.14665	0.37257	1.0000
Si	Si39	1.0	0.54101	0.33811	0.69068	1.0000
Si	Si40	1.0	0.78610	0.72357	0.68870	1.0000

Si	Si41	1.0	0.52927	0.71585	0.69762	1.0000
Si	Si42	1.0	0.78619	0.96786	0.69800	1.0000
Si	Si43	1.0	0.52843	0.95887	0.69810	1.0000
Si	Si44	1.0	0.45598	0.66066	0.19135	1.0000
Si	Si45	1.0	0.21093	0.27517	0.19169	1.0000
Si	Si46	1.0	0.46783	0.28707	0.19569	1.0000
Si	Si47	1.0	0.21574	0.03014	0.19898	1.0000
Si	Si48	1.0	0.47330	0.04333	0.19594	1.0000
Si	Si49	1.0	0.15946	0.84185	0.12406	1.0000
Si	Si50	1.0	0.53239	0.46854	0.12393	1.0000
Si	Si51	1.0	0.84089	0.15817	0.62368	1.0000
Si	Si52	1.0	0.46853	0.53060	0.62792	1.0000
Si	Si53	1.0	0.15186	0.15292	0.37462	1.0000
Si	Si54	1.0	0.53189	0.53209	0.37504	1.0000
Si	Si55	1.0	0.47157	0.46923	0.87552	1.0000
Si	Si56	1.0	0.79382	0.35140	0.70017	1.0000
Si	Si57	1.0	0.35308	0.79452	0.04804	1.0000
Si	Si58	1.0	0.20476	0.65272	0.20230	1.0000
Si	Si59	1.0	0.78166	0.05101	0.80818	1.0000

T7T7T7T9T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5309

_cell_length_b 12.5552

_cell_length_c 26.483

_cell_angle_alpha 89.9621

_cell_angle_beta 89.9914

_cell_angle_gamma 90.555

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47519	0.14590	0.53537	1.0000
H	H2	1.0	0.85523	0.52624	0.71137	1.0000
H	H3	1.0	0.52820	0.83897	0.03891	1.0000
H	H4	1.0	0.90383	0.02218	0.87144	1.0000
H	H5	1.0	0.06408	0.98065	0.35753	1.0000
O	O1	1.0	0.33185	0.66979	0.06151	1.0000
O	O2	1.0	0.34820	0.82004	0.98966	1.0000
O	O3	1.0	0.26385	0.86398	0.08064	1.0000

O	O4	1.0	0.33185	0.49514	0.00394	1.0000
O	O5	1.0	0.26635	0.48070	0.09761	1.0000
O	O6	1.0	0.46939	0.51474	0.07827	1.0000
O	O7	1.0	0.72680	0.65399	0.06253	1.0000
O	O8	1.0	0.85433	0.82294	0.05761	1.0000
O	O9	1.0	0.67235	0.83215	0.11086	1.0000
O	O10	1.0	0.85148	0.48460	0.06606	1.0000
O	O11	1.0	0.66249	0.47101	0.10405	1.0000
O	O12	1.0	0.98141	0.65333	0.05442	1.0000
O	O13	1.0	0.05341	0.83122	0.09363	1.0000
O	O14	1.0	0.05718	0.46601	0.08165	1.0000
O	O15	1.0	0.62558	0.32982	0.55240	1.0000
O	O16	1.0	0.67196	0.17024	0.48955	1.0000
O	O17	1.0	0.73894	0.16099	0.58517	1.0000
O	O18	1.0	0.53237	0.14024	0.56187	1.0000
O	O19	1.0	0.66880	0.50583	0.50005	1.0000
O	O20	1.0	0.76771	0.46677	0.58738	1.0000
O	O21	1.0	0.56055	0.51843	0.58417	1.0000
O	O22	1.0	0.28098	0.33948	0.56832	1.0000
O	O23	1.0	0.15098	0.17169	0.55583	1.0000
O	O24	1.0	0.33178	0.15555	0.60918	1.0000
O	O25	1.0	0.16718	0.51021	0.55008	1.0000
O	O26	1.0	0.35055	0.52780	0.59970	1.0000
O	O27	1.0	0.03083	0.34371	0.55721	1.0000
O	O28	1.0	0.95412	0.16323	0.59621	1.0000
O	O29	1.0	0.98954	0.52752	0.60213	1.0000
O	O30	1.0	0.33856	0.38349	0.31002	1.0000
O	O31	1.0	0.17238	0.33975	0.25016	1.0000
O	O32	1.0	0.20493	0.22195	0.33109	1.0000
O	O33	1.0	0.14206	0.42538	0.33933	1.0000
O	O34	1.0	0.49547	0.34557	0.24415	1.0000
O	O35	1.0	0.48621	0.23860	0.33085	1.0000
O	O36	1.0	0.53762	0.44656	0.32758	1.0000
O	O37	1.0	0.32613	0.71697	0.30402	1.0000

O	O38	1.0	0.15045	0.82801	0.30907	1.0000
O	O39	1.0	0.15438	0.63733	0.34804	1.0000
O	O40	1.0	0.49406	0.84073	0.31451	1.0000
O	O41	1.0	0.49573	0.64804	0.35364	1.0000
O	O42	1.0	0.32103	0.96442	0.31112	1.0000
O	O43	1.0	0.49719	0.03381	0.35318	1.0000
O	O44	1.0	0.67201	0.62026	0.80558	1.0000
O	O45	1.0	0.82993	0.65410	0.73734	1.0000
O	O46	1.0	0.82004	0.77166	0.82117	1.0000
O	O47	1.0	0.86675	0.56109	0.82285	1.0000
O	O48	1.0	0.49807	0.65491	0.75194	1.0000
O	O49	1.0	0.54250	0.77752	0.83224	1.0000
O	O50	1.0	0.48137	0.57719	0.84474	1.0000
O	O51	1.0	0.65893	0.28855	0.80583	1.0000
O	O52	1.0	0.82893	0.16978	0.82057	1.0000
O	O53	1.0	0.82534	0.36401	0.85620	1.0000
O	O54	1.0	0.49179	0.16515	0.81972	1.0000
O	O55	1.0	0.47977	0.36528	0.84300	1.0000
O	O56	1.0	0.66026	0.03418	0.81486	1.0000
O	O57	1.0	0.47866	0.97205	0.85382	1.0000
O	O58	1.0	0.63205	0.65984	0.94748	1.0000
O	O59	1.0	0.65851	0.82083	0.01236	1.0000
O	O60	1.0	0.77103	0.81706	0.92630	1.0000
O	O61	1.0	0.56098	0.85247	0.92673	1.0000
O	O62	1.0	0.68572	0.49015	0.00281	1.0000
O	O63	1.0	0.78447	0.53040	0.91529	1.0000
O	O64	1.0	0.58048	0.46619	0.91696	1.0000
O	O65	1.0	0.29486	0.64793	0.93829	1.0000
O	O66	1.0	0.17875	0.82384	0.93017	1.0000
O	O67	1.0	0.36891	0.81307	0.88924	1.0000
O	O68	1.0	0.16837	0.47891	0.93969	1.0000
O	O69	1.0	0.36663	0.46075	0.90820	1.0000
O	O70	1.0	0.04932	0.65538	0.93417	1.0000
O	O71	1.0	0.98489	0.84016	0.89550	1.0000

O	O72	1.0	0.98505	0.47392	0.89211	1.0000
O	O73	1.0	0.30766	0.32501	0.43933	1.0000
O	O74	1.0	0.34751	0.17988	0.51140	1.0000
O	O75	1.0	0.24575	0.12382	0.42665	1.0000
O	O76	1.0	0.45360	0.17433	0.42661	1.0000
O	O77	1.0	0.35118	0.48478	0.50242	1.0000
O	O78	1.0	0.23125	0.51564	0.42077	1.0000
O	O79	1.0	0.44001	0.48480	0.41362	1.0000
O	O80	1.0	0.67796	0.34654	0.43443	1.0000
O	O81	1.0	0.83217	0.20016	0.42639	1.0000
O	O82	1.0	0.64428	0.16204	0.38903	1.0000
O	O83	1.0	0.83055	0.49548	0.43437	1.0000
O	O84	1.0	0.64142	0.54336	0.40247	1.0000
O	O85	1.0	0.98360	0.34712	0.44023	1.0000
O	O86	1.0	0.02668	0.15868	0.40016	1.0000
O	O87	1.0	0.02332	0.53690	0.40404	1.0000
O	O88	1.0	0.66670	0.37590	0.69773	1.0000
O	O89	1.0	0.83557	0.33188	0.75627	1.0000
O	O90	1.0	0.83199	0.26343	0.66126	1.0000
O	O91	1.0	0.49142	0.31380	0.74670	1.0000
O	O92	1.0	0.53380	0.23741	0.65536	1.0000
O	O93	1.0	0.47599	0.44138	0.66930	1.0000
O	O94	1.0	0.65804	0.72217	0.69326	1.0000
O	O95	1.0	0.83177	0.84760	0.69076	1.0000
O	O96	1.0	0.82690	0.66801	0.63791	1.0000
O	O97	1.0	0.48433	0.83421	0.70020	1.0000
O	O98	1.0	0.47773	0.64940	0.65218	1.0000
O	O99	1.0	0.65844	0.96412	0.69953	1.0000
O	O100	1.0	0.83235	0.04984	0.65710	1.0000
O	O101	1.0	0.48117	0.01523	0.65214	1.0000
O	O102	1.0	0.33107	0.61806	0.19352	1.0000
O	O103	1.0	0.15884	0.66126	0.24826	1.0000
O	O104	1.0	0.19542	0.77204	0.16468	1.0000
O	O105	1.0	0.13372	0.56930	0.16131	1.0000

O	O106	1.0	0.49855	0.66843	0.25360	1.0000
O	O107	1.0	0.47460	0.75808	0.16302	1.0000
O	O108	1.0	0.52903	0.55401	0.17323	1.0000
O	O109	1.0	0.32931	0.29373	0.18656	1.0000
O	O110	1.0	0.16044	0.16527	0.19066	1.0000
O	O111	1.0	0.14113	0.35564	0.15276	1.0000
O	O112	1.0	0.49939	0.16953	0.18971	1.0000
O	O113	1.0	0.50932	0.35421	0.14357	1.0000
O	O114	1.0	0.33132	0.03804	0.19113	1.0000
O	O115	1.0	0.15253	0.97546	0.14702	1.0000
O	O116	1.0	0.51875	0.97817	0.15330	1.0000
O	O117	1.0	0.01943	0.82061	0.99515	1.0000
O	O118	1.0	0.98541	0.49105	0.98999	1.0000
O	O119	1.0	0.97700	0.17743	0.49852	1.0000
O	O120	1.0	0.98301	0.51351	0.50236	1.0000
O	O121	1.0	0.15957	0.99295	0.24657	1.0000
O	O122	1.0	0.49146	0.00702	0.25315	1.0000
O	O123	1.0	0.82956	0.00928	0.75450	1.0000
O	O124	1.0	0.49096	0.00937	0.75380	1.0000
O	O125	1.0	0.85472	0.47032	0.68429	1.0000
O	O126	1.0	0.47272	0.83869	0.06625	1.0000
O	O127	1.0	0.84700	0.98099	0.85507	1.0000
O	O128	1.0	0.13102	0.01368	0.34656	1.0000
Al	Al1	1.0	0.46312	0.13710	0.62558	1.0000
Al	Al2	1.0	0.86006	0.54027	0.62085	1.0000
Al	Al3	1.0	0.54249	0.85413	0.12988	1.0000
Al	Al4	1.0	0.85450	0.83726	0.87579	1.0000
Al	Al5	1.0	0.15478	0.14421	0.37901	1.0000
Si	Si1	1.0	0.34935	0.54033	0.06042	1.0000
Si	Si2	1.0	0.73038	0.78336	0.06261	1.0000
Si	Si3	1.0	0.73003	0.52542	0.05861	1.0000
Si	Si4	1.0	0.97623	0.78207	0.05004	1.0000
Si	Si5	1.0	0.96845	0.52535	0.04837	1.0000
Si	Si6	1.0	0.64840	0.20446	0.54719	1.0000

Si	Si7	1.0	0.65795	0.45682	0.55679	1.0000
Si	Si8	1.0	0.27471	0.21102	0.56234	1.0000
Si	Si9	1.0	0.28690	0.46538	0.55529	1.0000
Si	Si10	1.0	0.02912	0.21548	0.55184	1.0000
Si	Si11	1.0	0.04248	0.47351	0.55384	1.0000
Si	Si12	1.0	0.21452	0.34012	0.30851	1.0000
Si	Si13	1.0	0.46396	0.35241	0.30345	1.0000
Si	Si14	1.0	0.19809	0.70794	0.30224	1.0000
Si	Si15	1.0	0.45518	0.71790	0.30625	1.0000
Si	Si16	1.0	0.45206	0.96176	0.30721	1.0000
Si	Si17	1.0	0.13910	0.52581	0.37786	1.0000
Si	Si18	1.0	0.79682	0.65624	0.79772	1.0000
Si	Si19	1.0	0.54801	0.65768	0.80846	1.0000
Si	Si20	1.0	0.78661	0.29062	0.80986	1.0000
Si	Si21	1.0	0.52961	0.28391	0.80316	1.0000
Si	Si22	1.0	0.52973	0.04437	0.80941	1.0000
Si	Si23	1.0	0.86354	0.48346	0.87199	1.0000
Si	Si24	1.0	0.65964	0.78731	0.95197	1.0000
Si	Si25	1.0	0.67131	0.53651	0.94586	1.0000
Si	Si26	1.0	0.29679	0.77611	0.93665	1.0000
Si	Si27	1.0	0.28994	0.52092	0.94744	1.0000
Si	Si28	1.0	0.05548	0.78501	0.93834	1.0000
Si	Si29	1.0	0.04845	0.52688	0.93929	1.0000
Si	Si30	1.0	0.48885	0.85212	0.87558	1.0000
Si	Si31	1.0	0.33610	0.19984	0.44992	1.0000
Si	Si32	1.0	0.33262	0.45250	0.44372	1.0000
Si	Si33	1.0	0.70731	0.22086	0.43483	1.0000
Si	Si34	1.0	0.70527	0.47236	0.44348	1.0000
Si	Si35	1.0	0.95652	0.22003	0.44098	1.0000
Si	Si36	1.0	0.95462	0.47222	0.44600	1.0000
Si	Si37	1.0	0.51857	0.15342	0.37426	1.0000
Si	Si38	1.0	0.54051	0.33979	0.69085	1.0000
Si	Si39	1.0	0.78678	0.72509	0.68790	1.0000
Si	Si40	1.0	0.52946	0.71434	0.69880	1.0000

Si	Si41	1.0	0.78671	0.96696	0.69912	1.0000
Si	Si42	1.0	0.52808	0.95644	0.70011	1.0000
Si	Si43	1.0	0.20703	0.65563	0.19132	1.0000
Si	Si44	1.0	0.45851	0.65195	0.19535	1.0000
Si	Si45	1.0	0.20178	0.28805	0.19592	1.0000
Si	Si46	1.0	0.45815	0.29076	0.19133	1.0000
Si	Si47	1.0	0.20307	0.04421	0.19334	1.0000
Si	Si48	1.0	0.46133	0.04625	0.19592	1.0000
Si	Si49	1.0	0.14962	0.46829	0.12375	1.0000
Si	Si50	1.0	0.16513	0.85879	0.12154	1.0000
Si	Si51	1.0	0.54148	0.47368	0.12575	1.0000
Si	Si52	1.0	0.83968	0.15917	0.62441	1.0000
Si	Si53	1.0	0.46726	0.53291	0.62601	1.0000
Si	Si54	1.0	0.52759	0.53080	0.37404	1.0000
Si	Si55	1.0	0.47896	0.46897	0.87847	1.0000
Si	Si56	1.0	0.79297	0.35453	0.69932	1.0000
Si	Si57	1.0	0.34940	0.79522	0.04948	1.0000
Si	Si58	1.0	0.78619	0.05065	0.80795	1.0000
Si	Si59	1.0	0.19637	0.94693	0.30032	1.0000

AlSiAl-T2T7T7T9T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5145

_cell_length_b 12.5144

_cell_length_c 26.4924

_cell_angle_alpha 90.1927

_cell_angle_beta 90.0972

_cell_angle_gamma 90.3932

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.49251	0.14379	0.52744	1.0000
H	H2	1.0	0.85314	0.51752	0.71675	1.0000
H	H3	1.0	0.56281	0.83771	0.34741	1.0000
H	H4	1.0	0.05959	0.02670	0.14026	1.0000
H	H5	1.0	0.43375	0.17158	0.84869	1.0000
O	O1	1.0	0.29277	0.66689	0.06078	1.0000
O	O2	1.0	0.34844	0.81257	0.99189	1.0000
O	O3	1.0	0.24663	0.87167	0.07558	1.0000

O	O4	1.0	0.44928	0.80594	0.07880	1.0000
O	O5	1.0	0.34008	0.49956	0.00142	1.0000
O	O6	1.0	0.22542	0.47150	0.08327	1.0000
O	O7	1.0	0.43280	0.51889	0.08936	1.0000
O	O8	1.0	0.69393	0.66549	0.06540	1.0000
O	O9	1.0	0.83099	0.82922	0.05864	1.0000
O	O10	1.0	0.64548	0.85444	0.10361	1.0000
O	O11	1.0	0.82594	0.49847	0.05988	1.0000
O	O12	1.0	0.63775	0.47283	0.09765	1.0000
O	O13	1.0	0.96271	0.66226	0.05664	1.0000
O	O14	1.0	0.02193	0.84724	0.09732	1.0000
O	O15	1.0	0.01501	0.47937	0.09978	1.0000
O	O16	1.0	0.64051	0.33229	0.55090	1.0000
O	O17	1.0	0.69776	0.17366	0.48944	1.0000
O	O18	1.0	0.74365	0.16081	0.58833	1.0000
O	O19	1.0	0.54480	0.14203	0.55549	1.0000
O	O20	1.0	0.68177	0.50982	0.49986	1.0000
O	O21	1.0	0.77662	0.47251	0.58933	1.0000
O	O22	1.0	0.56725	0.51892	0.58164	1.0000
O	O23	1.0	0.28774	0.32531	0.56963	1.0000
O	O24	1.0	0.15577	0.15755	0.55683	1.0000
O	O25	1.0	0.34207	0.13477	0.60390	1.0000
O	O26	1.0	0.17468	0.49786	0.55135	1.0000
O	O27	1.0	0.35788	0.51559	0.60085	1.0000
O	O28	1.0	0.03847	0.33237	0.55640	1.0000
O	O29	1.0	0.95669	0.15102	0.59253	1.0000
O	O30	1.0	0.00280	0.50651	0.61071	1.0000
O	O31	1.0	0.34319	0.38131	0.31224	1.0000
O	O32	1.0	0.17046	0.35130	0.25511	1.0000
O	O33	1.0	0.20728	0.22107	0.33142	1.0000
O	O34	1.0	0.14892	0.42410	0.34759	1.0000
O	O35	1.0	0.49546	0.33109	0.24490	1.0000
O	O36	1.0	0.48780	0.23349	0.33293	1.0000
O	O37	1.0	0.54419	0.44011	0.32689	1.0000

O	O38	1.0	0.33046	0.72580	0.31079	1.0000
O	O39	1.0	0.14757	0.83008	0.31154	1.0000
O	O40	1.0	0.15859	0.63802	0.35012	1.0000
O	O41	1.0	0.49582	0.63610	0.35834	1.0000
O	O42	1.0	0.31641	0.96316	0.31041	1.0000
O	O43	1.0	0.13090	0.02524	0.34849	1.0000
O	O44	1.0	0.51795	0.03054	0.35374	1.0000
O	O45	1.0	0.67031	0.63591	0.81491	1.0000
O	O46	1.0	0.82329	0.65157	0.74254	1.0000
O	O47	1.0	0.83615	0.76785	0.82658	1.0000
O	O48	1.0	0.86237	0.55516	0.82663	1.0000
O	O49	1.0	0.51515	0.65215	0.74812	1.0000
O	O50	1.0	0.52118	0.78636	0.82707	1.0000
O	O51	1.0	0.47051	0.58442	0.84005	1.0000
O	O52	1.0	0.65593	0.29019	0.80926	1.0000
O	O53	1.0	0.82364	0.16332	0.82709	1.0000
O	O54	1.0	0.82302	0.36002	0.85960	1.0000
O	O55	1.0	0.46833	0.37373	0.83683	1.0000
O	O56	1.0	0.66049	0.02916	0.81290	1.0000
O	O57	1.0	0.84453	0.96790	0.85549	1.0000
O	O58	1.0	0.45138	0.97859	0.84884	1.0000
O	O59	1.0	0.62301	0.66987	0.93666	1.0000
O	O60	1.0	0.65499	0.82777	0.00351	1.0000
O	O61	1.0	0.76861	0.81956	0.91919	1.0000
O	O62	1.0	0.55881	0.86663	0.91801	1.0000
O	O63	1.0	0.65641	0.50794	0.99967	1.0000
O	O64	1.0	0.77691	0.52871	0.91810	1.0000
O	O65	1.0	0.57172	0.47148	0.91067	1.0000
O	O66	1.0	0.28310	0.64899	0.93593	1.0000
O	O67	1.0	0.16819	0.82518	0.93703	1.0000
O	O68	1.0	0.35764	0.81732	0.89185	1.0000
O	O69	1.0	0.16468	0.47638	0.94363	1.0000
O	O70	1.0	0.35741	0.46403	0.90436	1.0000
O	O71	1.0	0.04254	0.65355	0.94235	1.0000

O	O72	1.0	0.97452	0.82920	0.89746	1.0000
O	O73	1.0	0.97710	0.47193	0.90076	1.0000
O	O74	1.0	0.31031	0.32152	0.43587	1.0000
O	O75	1.0	0.34281	0.17081	0.50671	1.0000
O	O76	1.0	0.25053	0.12314	0.41808	1.0000
O	O77	1.0	0.45971	0.16850	0.42725	1.0000
O	O78	1.0	0.35972	0.47038	0.50422	1.0000
O	O79	1.0	0.26112	0.52447	0.41876	1.0000
O	O80	1.0	0.46316	0.46587	0.41856	1.0000
O	O81	1.0	0.71496	0.35126	0.43545	1.0000
O	O82	1.0	0.85007	0.18947	0.42062	1.0000
O	O83	1.0	0.65336	0.17270	0.39033	1.0000
O	O84	1.0	0.84643	0.52073	0.43593	1.0000
O	O85	1.0	0.65587	0.53963	0.40036	1.0000
O	O86	1.0	0.97575	0.35358	0.44502	1.0000
O	O87	1.0	0.05227	0.18683	0.39803	1.0000
O	O88	1.0	0.04952	0.54140	0.41724	1.0000
O	O89	1.0	0.67545	0.35554	0.69609	1.0000
O	O90	1.0	0.83609	0.32010	0.76009	1.0000
O	O91	1.0	0.85150	0.25735	0.66278	1.0000
O	O92	1.0	0.49660	0.30539	0.74267	1.0000
O	O93	1.0	0.53296	0.23192	0.64999	1.0000
O	O94	1.0	0.49338	0.44002	0.66825	1.0000
O	O95	1.0	0.66764	0.71872	0.68477	1.0000
O	O96	1.0	0.84262	0.84431	0.69634	1.0000
O	O97	1.0	0.85256	0.66330	0.64441	1.0000
O	O98	1.0	0.49373	0.83353	0.69815	1.0000
O	O99	1.0	0.48139	0.64799	0.65002	1.0000
O	O100	1.0	0.66821	0.95757	0.70098	1.0000
O	O101	1.0	0.84071	0.04311	0.65795	1.0000
O	O102	1.0	0.51076	0.00104	0.63871	1.0000
O	O103	1.0	0.34217	0.64364	0.19034	1.0000
O	O104	1.0	0.17452	0.65815	0.25161	1.0000
O	O105	1.0	0.18898	0.78605	0.17192	1.0000

O	O106	1.0	0.14947	0.57639	0.16251	1.0000
O	O107	1.0	0.49997	0.66350	0.25797	1.0000
O	O108	1.0	0.51354	0.76922	0.17275	1.0000
O	O109	1.0	0.53213	0.55610	0.17536	1.0000
O	O110	1.0	0.32220	0.29779	0.18982	1.0000
O	O111	1.0	0.15070	0.17548	0.19881	1.0000
O	O112	1.0	0.13275	0.36344	0.15720	1.0000
O	O113	1.0	0.48478	0.16193	0.18282	1.0000
O	O114	1.0	0.50135	0.35474	0.14548	1.0000
O	O115	1.0	0.31541	0.03580	0.18929	1.0000
O	O116	1.0	0.48933	0.96892	0.14314	1.0000
O	O117	1.0	0.99800	0.82702	0.99706	1.0000
O	O118	1.0	0.99338	0.48811	0.00048	1.0000
O	O119	1.0	0.99124	0.17083	0.49471	1.0000
O	O120	1.0	0.98355	0.51239	0.51149	1.0000
O	O121	1.0	0.14812	0.99467	0.25014	1.0000
O	O122	1.0	0.49068	0.99244	0.24366	1.0000
O	O123	1.0	0.83716	0.01384	0.75668	1.0000
O	O124	1.0	0.48777	0.02605	0.73935	1.0000
O	O125	1.0	0.85748	0.46259	0.68939	1.0000
O	O126	1.0	0.50775	0.83055	0.32146	1.0000
O	O127	1.0	0.12820	0.99638	0.14997	1.0000
O	O128	1.0	0.48086	0.17341	0.81943	1.0000
Al	Al1	1.0	0.47530	0.12491	0.61901	1.0000
Al	Al2	1.0	0.87293	0.53313	0.62655	1.0000
Al	Al3	1.0	0.45237	0.96712	0.30475	1.0000
Al	Al4	1.0	0.14906	0.86071	0.12081	1.0000
Al	Al5	1.0	0.52561	0.03625	0.80141	1.0000
Si	Si1	1.0	0.33278	0.79170	0.05220	1.0000
Si	Si2	1.0	0.32310	0.54049	0.05911	1.0000
Si	Si3	1.0	0.70666	0.79408	0.05748	1.0000
Si	Si4	1.0	0.70377	0.53801	0.05523	1.0000
Si	Si5	1.0	0.95467	0.79195	0.05284	1.0000
Si	Si6	1.0	0.94959	0.53392	0.05394	1.0000

Si	Si7	1.0	0.52328	0.85014	0.12465	1.0000
Si	Si8	1.0	0.66309	0.20650	0.54622	1.0000
Si	Si9	1.0	0.66961	0.46036	0.55668	1.0000
Si	Si10	1.0	0.27975	0.19678	0.56078	1.0000
Si	Si11	1.0	0.29441	0.45180	0.55694	1.0000
Si	Si12	1.0	0.03560	0.20408	0.55068	1.0000
Si	Si13	1.0	0.05027	0.46224	0.55905	1.0000
Si	Si14	1.0	0.21753	0.34414	0.31224	1.0000
Si	Si15	1.0	0.46770	0.34530	0.30419	1.0000
Si	Si16	1.0	0.20084	0.71326	0.30546	1.0000
Si	Si17	1.0	0.18957	0.95292	0.30556	1.0000
Si	Si18	1.0	0.15510	0.53049	0.38323	1.0000
Si	Si19	1.0	0.79687	0.65507	0.80311	1.0000
Si	Si20	1.0	0.54411	0.66618	0.80738	1.0000
Si	Si21	1.0	0.78544	0.28226	0.81421	1.0000
Si	Si22	1.0	0.78766	0.04089	0.81247	1.0000
Si	Si23	1.0	0.85883	0.47931	0.87655	1.0000
Si	Si24	1.0	0.65189	0.79691	0.94403	1.0000
Si	Si25	1.0	0.65762	0.54530	0.94118	1.0000
Si	Si26	1.0	0.28902	0.77777	0.93964	1.0000
Si	Si27	1.0	0.28576	0.52290	0.94678	1.0000
Si	Si28	1.0	0.04556	0.78359	0.94385	1.0000
Si	Si29	1.0	0.04465	0.52451	0.94701	1.0000
Si	Si30	1.0	0.47154	0.86276	0.87192	1.0000
Si	Si31	1.0	0.33986	0.19642	0.44649	1.0000
Si	Si32	1.0	0.34766	0.44590	0.44462	1.0000
Si	Si33	1.0	0.72858	0.22277	0.43402	1.0000
Si	Si34	1.0	0.72481	0.47966	0.44400	1.0000
Si	Si35	1.0	0.96818	0.22512	0.44014	1.0000
Si	Si36	1.0	0.96415	0.48139	0.45296	1.0000
Si	Si37	1.0	0.52935	0.14945	0.37550	1.0000
Si	Si38	1.0	0.54810	0.33055	0.68715	1.0000
Si	Si39	1.0	0.79673	0.72290	0.69044	1.0000
Si	Si40	1.0	0.53988	0.71413	0.69503	1.0000

Si	Si41	1.0	0.79609	0.96518	0.70286	1.0000
Si	Si42	1.0	0.53814	0.95660	0.69382	1.0000
Si	Si43	1.0	0.21373	0.66917	0.19300	1.0000
Si	Si44	1.0	0.47006	0.65924	0.19762	1.0000
Si	Si45	1.0	0.19508	0.29849	0.20029	1.0000
Si	Si46	1.0	0.45127	0.28534	0.19103	1.0000
Si	Si47	1.0	0.44727	0.03817	0.19107	1.0000
Si	Si48	1.0	0.13168	0.47457	0.12570	1.0000
Si	Si49	1.0	0.52485	0.47573	0.12689	1.0000
Si	Si50	1.0	0.84800	0.15200	0.62561	1.0000
Si	Si51	1.0	0.47633	0.52999	0.62501	1.0000
Si	Si52	1.0	0.16015	0.13936	0.37422	1.0000
Si	Si53	1.0	0.53923	0.51881	0.37590	1.0000
Si	Si54	1.0	0.85514	0.84649	0.87516	1.0000
Si	Si55	1.0	0.46803	0.47701	0.87378	1.0000
Si	Si56	1.0	0.80211	0.34196	0.70212	1.0000
Si	Si57	1.0	0.45595	0.70590	0.31121	1.0000
Si	Si58	1.0	0.19126	0.05341	0.20038	1.0000
Si	Si59	1.0	0.52933	0.29267	0.80064	1.0000

AlSiAl-T7T7T7T7T9:

data_image0

_chemical_formula_structural H5O128Al5Si59

_chemical_formula_sum "H5 O128 Al5 Si59"

_cell_length_a 12.5436

_cell_length_b 12.5317

_cell_length_c 26.4309

_cell_angle_alpha 89.8828

_cell_angle_beta 89.7104

_cell_angle_gamma 91.0602

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48162	0.13859	0.53278	1.0000
H	H2	1.0	0.85781	0.51880	0.71714	1.0000
H	H3	1.0	0.52636	0.85556	0.03142	1.0000
H	H4	1.0	0.13397	0.48498	0.21809	1.0000
H	H5	1.0	0.08549	0.01064	0.14253	1.0000
O	O1	1.0	0.37151	0.67192	0.04818	1.0000
O	O2	1.0	0.32810	0.83326	0.98639	1.0000
O	O3	1.0	0.26756	0.84449	0.08432	1.0000

O	O4	1.0	0.30784	0.48820	0.00633	1.0000
O	O5	1.0	0.23853	0.54180	0.09783	1.0000
O	O6	1.0	0.44139	0.48647	0.08085	1.0000
O	O7	1.0	0.71624	0.66040	0.05817	1.0000
O	O8	1.0	0.84341	0.83287	0.04944	1.0000
O	O9	1.0	0.66491	0.83949	0.10492	1.0000
O	O10	1.0	0.83270	0.48752	0.05259	1.0000
O	O11	1.0	0.64804	0.47842	0.09995	1.0000
O	O12	1.0	0.96221	0.66046	0.05180	1.0000
O	O13	1.0	0.03643	0.84349	0.09080	1.0000
O	O14	1.0	0.01434	0.48380	0.10066	1.0000
O	O15	1.0	0.63155	0.33029	0.55189	1.0000
O	O16	1.0	0.67790	0.16915	0.49021	1.0000
O	O17	1.0	0.73763	0.16011	0.58756	1.0000
O	O18	1.0	0.53447	0.13979	0.56064	1.0000
O	O19	1.0	0.68571	0.51252	0.50515	1.0000
O	O20	1.0	0.76458	0.46687	0.59556	1.0000
O	O21	1.0	0.55812	0.51583	0.58221	1.0000
O	O22	1.0	0.28066	0.33571	0.56150	1.0000
O	O23	1.0	0.14996	0.16596	0.55444	1.0000
O	O24	1.0	0.33181	0.15388	0.60605	1.0000
O	O25	1.0	0.16870	0.50998	0.55148	1.0000
O	O26	1.0	0.35031	0.51909	0.60164	1.0000
O	O27	1.0	0.03451	0.34051	0.55348	1.0000
O	O28	1.0	0.95080	0.16146	0.59172	1.0000
O	O29	1.0	0.98981	0.51726	0.60342	1.0000
O	O30	1.0	0.33501	0.38287	0.30965	1.0000
O	O31	1.0	0.17090	0.35238	0.24528	1.0000
O	O32	1.0	0.18438	0.23523	0.32838	1.0000
O	O33	1.0	0.14030	0.44497	0.33204	1.0000
O	O34	1.0	0.50129	0.34595	0.24928	1.0000
O	O35	1.0	0.46766	0.22797	0.33224	1.0000
O	O36	1.0	0.53377	0.42939	0.33882	1.0000
O	O37	1.0	0.35140	0.71531	0.30862	1.0000

O	O38	1.0	0.18221	0.83433	0.32684	1.0000
O	O39	1.0	0.19439	0.64049	0.36446	1.0000
O	O40	1.0	0.51952	0.83986	0.31625	1.0000
O	O41	1.0	0.53468	0.64161	0.34264	1.0000
O	O42	1.0	0.34768	0.96942	0.31529	1.0000
O	O43	1.0	0.16344	0.03366	0.35380	1.0000
O	O44	1.0	0.53719	0.03361	0.34588	1.0000
O	O45	1.0	0.66893	0.61935	0.81001	1.0000
O	O46	1.0	0.82682	0.65562	0.74218	1.0000
O	O47	1.0	0.81886	0.76815	0.82686	1.0000
O	O48	1.0	0.86535	0.55876	0.82737	1.0000
O	O49	1.0	0.50490	0.64838	0.74862	1.0000
O	O50	1.0	0.53473	0.77601	0.82817	1.0000
O	O51	1.0	0.46996	0.57507	0.84054	1.0000
O	O52	1.0	0.64829	0.29298	0.80793	1.0000
O	O53	1.0	0.81201	0.16510	0.82705	1.0000
O	O54	1.0	0.81273	0.36269	0.85870	1.0000
O	O55	1.0	0.48275	0.16274	0.81867	1.0000
O	O56	1.0	0.46152	0.36276	0.84088	1.0000
O	O57	1.0	0.64923	0.02911	0.81392	1.0000
O	O58	1.0	0.83146	0.96764	0.85520	1.0000
O	O59	1.0	0.45997	0.96764	0.84714	1.0000
O	O60	1.0	0.62243	0.66496	0.93860	1.0000
O	O61	1.0	0.65057	0.82476	0.00570	1.0000
O	O62	1.0	0.76818	0.81875	0.92203	1.0000
O	O63	1.0	0.55809	0.86026	0.91964	1.0000
O	O64	1.0	0.65391	0.49964	0.00002	1.0000
O	O65	1.0	0.77847	0.53175	0.91881	1.0000
O	O66	1.0	0.57785	0.46594	0.90897	1.0000
O	O67	1.0	0.28742	0.64866	0.94276	1.0000
O	O68	1.0	0.16645	0.81538	0.92143	1.0000
O	O69	1.0	0.36315	0.80478	0.88741	1.0000
O	O70	1.0	0.16399	0.47922	0.93221	1.0000
O	O71	1.0	0.36589	0.46450	0.91129	1.0000

O	O72	1.0	0.03362	0.64933	0.93406	1.0000
O	O73	1.0	0.96854	0.83004	0.89259	1.0000
O	O74	1.0	0.97157	0.46094	0.90070	1.0000
O	O75	1.0	0.37617	0.32999	0.43930	1.0000
O	O76	1.0	0.34302	0.17176	0.50733	1.0000
O	O77	1.0	0.23184	0.17520	0.42251	1.0000
O	O78	1.0	0.44163	0.13486	0.42207	1.0000
O	O79	1.0	0.35277	0.49290	0.50268	1.0000
O	O80	1.0	0.22351	0.46917	0.42356	1.0000
O	O81	1.0	0.42564	0.52857	0.41069	1.0000
O	O82	1.0	0.70672	0.35182	0.44211	1.0000
O	O83	1.0	0.83493	0.18877	0.42283	1.0000
O	O84	1.0	0.63772	0.18699	0.39099	1.0000
O	O85	1.0	0.83664	0.51868	0.43345	1.0000
O	O86	1.0	0.63815	0.53844	0.40918	1.0000
O	O87	1.0	0.96997	0.35260	0.43700	1.0000
O	O88	1.0	0.03210	0.17261	0.39397	1.0000
O	O89	1.0	0.03134	0.54234	0.40430	1.0000
O	O90	1.0	0.66846	0.36658	0.69806	1.0000
O	O91	1.0	0.83021	0.32129	0.75951	1.0000
O	O92	1.0	0.83914	0.26157	0.66215	1.0000
O	O93	1.0	0.48719	0.31007	0.74535	1.0000
O	O94	1.0	0.53025	0.23698	0.65338	1.0000
O	O95	1.0	0.48288	0.44268	0.67014	1.0000
O	O96	1.0	0.66230	0.71871	0.68920	1.0000
O	O97	1.0	0.83271	0.84904	0.69527	1.0000
O	O98	1.0	0.84279	0.66698	0.64338	1.0000
O	O99	1.0	0.48901	0.83199	0.69963	1.0000
O	O100	1.0	0.47878	0.64991	0.64954	1.0000
O	O101	1.0	0.65902	0.96552	0.69639	1.0000
O	O102	1.0	0.83776	0.04801	0.65758	1.0000
O	O103	1.0	0.48144	0.01057	0.64799	1.0000
O	O104	1.0	0.33053	0.62803	0.20169	1.0000
O	O105	1.0	0.16941	0.66709	0.26498	1.0000

O	O106	1.0	0.16463	0.74761	0.17109	1.0000
O	O107	1.0	0.51245	0.68667	0.24571	1.0000
O	O108	1.0	0.46469	0.76297	0.15453	1.0000
O	O109	1.0	0.51622	0.55813	0.16905	1.0000
O	O110	1.0	0.33671	0.28493	0.19392	1.0000
O	O111	1.0	0.16447	0.16039	0.19969	1.0000
O	O112	1.0	0.15929	0.34013	0.14562	1.0000
O	O113	1.0	0.50695	0.16717	0.19606	1.0000
O	O114	1.0	0.51681	0.35173	0.14890	1.0000
O	O115	1.0	0.33608	0.03464	0.19130	1.0000
O	O116	1.0	0.51746	0.98630	0.14654	1.0000
O	O117	1.0	0.01438	0.82285	0.99130	1.0000
O	O118	1.0	0.01016	0.48831	0.99970	1.0000
O	O119	1.0	0.98436	0.17742	0.49317	1.0000
O	O120	1.0	0.98660	0.51373	0.50267	1.0000
O	O121	1.0	0.17814	0.98357	0.25577	1.0000
O	O122	1.0	0.50332	0.98900	0.24750	1.0000
O	O123	1.0	0.82253	0.01587	0.75627	1.0000
O	O124	1.0	0.48774	0.01414	0.74881	1.0000
O	O125	1.0	0.85772	0.46516	0.68941	1.0000
O	O126	1.0	0.46955	0.85974	0.05811	1.0000
O	O127	1.0	0.13720	0.53875	0.19045	1.0000
O	O128	1.0	0.14679	0.97297	0.15603	1.0000
Al	Al1	1.0	0.46180	0.13471	0.62395	1.0000
Al	Al2	1.0	0.86435	0.53676	0.62623	1.0000
Al	Al3	1.0	0.53439	0.86147	0.12214	1.0000
Al	Al4	1.0	0.13689	0.47047	0.12690	1.0000
Al	Al5	1.0	0.15576	0.83796	0.12228	1.0000
Si	Si1	1.0	0.33756	0.54711	0.05944	1.0000
Si	Si2	1.0	0.72179	0.78959	0.05664	1.0000
Si	Si3	1.0	0.71297	0.53180	0.05301	1.0000
Si	Si4	1.0	0.96544	0.78954	0.04683	1.0000
Si	Si5	1.0	0.95605	0.53055	0.05221	1.0000
Si	Si6	1.0	0.65195	0.20438	0.54793	1.0000

Si	Si7	1.0	0.66241	0.45748	0.56001	1.0000
Si	Si8	1.0	0.27379	0.20651	0.55907	1.0000
Si	Si9	1.0	0.28775	0.46418	0.55492	1.0000
Si	Si10	1.0	0.03015	0.21238	0.54859	1.0000
Si	Si11	1.0	0.04439	0.47061	0.55395	1.0000
Si	Si12	1.0	0.20860	0.35274	0.30472	1.0000
Si	Si13	1.0	0.45970	0.34646	0.30739	1.0000
Si	Si14	1.0	0.22423	0.71442	0.31622	1.0000
Si	Si15	1.0	0.47978	0.71977	0.30266	1.0000
Si	Si16	1.0	0.21911	0.95557	0.31313	1.0000
Si	Si17	1.0	0.47573	0.95815	0.30546	1.0000
Si	Si18	1.0	0.14856	0.52427	0.38107	1.0000
Si	Si19	1.0	0.79442	0.65221	0.80235	1.0000
Si	Si20	1.0	0.54416	0.65477	0.80682	1.0000
Si	Si21	1.0	0.77555	0.28494	0.81351	1.0000
Si	Si22	1.0	0.51994	0.28243	0.80293	1.0000
Si	Si23	1.0	0.77811	0.04315	0.81269	1.0000
Si	Si24	1.0	0.52135	0.04312	0.80620	1.0000
Si	Si25	1.0	0.85583	0.47879	0.87639	1.0000
Si	Si26	1.0	0.65149	0.79139	0.94570	1.0000
Si	Si27	1.0	0.65829	0.54019	0.94184	1.0000
Si	Si28	1.0	0.28555	0.77588	0.93456	1.0000
Si	Si29	1.0	0.28190	0.52025	0.94842	1.0000
Si	Si30	1.0	0.04470	0.77867	0.93554	1.0000
Si	Si31	1.0	0.04454	0.52124	0.94269	1.0000
Si	Si32	1.0	0.47898	0.85095	0.87077	1.0000
Si	Si33	1.0	0.34657	0.20388	0.44731	1.0000
Si	Si34	1.0	0.34458	0.45569	0.44428	1.0000
Si	Si35	1.0	0.71479	0.22440	0.43648	1.0000
Si	Si36	1.0	0.71661	0.48029	0.44788	1.0000
Si	Si37	1.0	0.95641	0.22363	0.43735	1.0000
Si	Si38	1.0	0.95636	0.48050	0.44542	1.0000
Si	Si39	1.0	0.52094	0.14727	0.37290	1.0000
Si	Si40	1.0	0.54107	0.33668	0.69061	1.0000

Si	Si41	1.0	0.79145	0.72527	0.69086	1.0000
Si	Si42	1.0	0.53395	0.71251	0.69633	1.0000
Si	Si43	1.0	0.78705	0.96931	0.70115	1.0000
Si	Si44	1.0	0.52903	0.95614	0.69719	1.0000
Si	Si45	1.0	0.45615	0.66182	0.19128	1.0000
Si	Si46	1.0	0.20809	0.28464	0.19409	1.0000
Si	Si47	1.0	0.46596	0.28823	0.19649	1.0000
Si	Si48	1.0	0.46767	0.04323	0.19433	1.0000
Si	Si49	1.0	0.52959	0.47051	0.12456	1.0000
Si	Si50	1.0	0.84167	0.15740	0.62484	1.0000
Si	Si51	1.0	0.46852	0.53089	0.62589	1.0000
Si	Si52	1.0	0.15298	0.15449	0.37478	1.0000
Si	Si53	1.0	0.53214	0.53361	0.37540	1.0000
Si	Si54	1.0	0.84704	0.84614	0.87439	1.0000
Si	Si55	1.0	0.46949	0.46799	0.87545	1.0000
Si	Si56	1.0	0.79438	0.34704	0.70207	1.0000
Si	Si57	1.0	0.35080	0.79889	0.04474	1.0000
Si	Si58	1.0	0.20482	0.65359	0.20591	1.0000
Si	Si59	1.0	0.21168	0.04141	0.20329	1.0000

T1T1T7T7T7T7

data_image0

_chemical_formula_structural H₆O₁₂₈Al₆Si₅₈

_chemical_formula_sum "H₆ O₁₂₈ Al₆ Si₅₈"

_cell_length_a 12.5338

_cell_length_b 12.5326

_cell_length_c 26.4749

_cell_angle_alpha 89.8857

_cell_angle_beta 89.8145

_cell_angle_gamma 91.2239

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47862	0.14150	0.53322	1.0000
H	H2	1.0	0.85763	0.52056	0.71665	1.0000
H	H3	1.0	0.52001	0.86104	0.03336	1.0000
H	H4	1.0	0.12925	0.82259	0.36134	1.0000
H	H5	1.0	0.13894	0.48109	0.21718	1.0000
H	H6	1.0	0.17868	0.86993	0.88888	1.0000
O	O1	1.0	0.37320	0.66820	0.05002	1.0000
O	O2	1.0	0.32669	0.82895	0.98891	1.0000

O	O3	1.0	0.25889	0.83365	0.08509	1.0000
O	O4	1.0	0.31140	0.48709	0.00588	1.0000
O	O5	1.0	0.23749	0.53713	0.09709	1.0000
O	O6	1.0	0.44144	0.48225	0.08187	1.0000
O	O7	1.0	0.71850	0.66161	0.05920	1.0000
O	O8	1.0	0.85042	0.83165	0.05615	1.0000
O	O9	1.0	0.66491	0.84015	0.10561	1.0000
O	O10	1.0	0.83289	0.48718	0.05199	1.0000
O	O11	1.0	0.64911	0.47865	0.09977	1.0000
O	O12	1.0	0.96498	0.65771	0.05230	1.0000
O	O13	1.0	0.04549	0.83084	0.09680	1.0000
O	O14	1.0	0.01289	0.48143	0.10172	1.0000
O	O15	1.0	0.62977	0.33313	0.55211	1.0000
O	O16	1.0	0.67432	0.17186	0.49044	1.0000
O	O17	1.0	0.73604	0.16293	0.58747	1.0000
O	O18	1.0	0.53209	0.14238	0.56100	1.0000
O	O19	1.0	0.68446	0.51604	0.50490	1.0000
O	O20	1.0	0.76427	0.46968	0.59505	1.0000
O	O21	1.0	0.55805	0.51892	0.58210	1.0000
O	O22	1.0	0.28092	0.33636	0.56070	1.0000
O	O23	1.0	0.14809	0.16818	0.55358	1.0000
O	O24	1.0	0.32934	0.15465	0.60586	1.0000
O	O25	1.0	0.16825	0.51105	0.55168	1.0000
O	O26	1.0	0.35023	0.52024	0.60073	1.0000
O	O27	1.0	0.03236	0.34288	0.55322	1.0000
O	O28	1.0	0.94979	0.16390	0.59212	1.0000
O	O29	1.0	0.98900	0.52057	0.60275	1.0000
O	O30	1.0	0.33057	0.37797	0.31055	1.0000
O	O31	1.0	0.17151	0.34158	0.24378	1.0000
O	O32	1.0	0.18324	0.22488	0.32775	1.0000
O	O33	1.0	0.13388	0.43274	0.33082	1.0000
O	O34	1.0	0.49692	0.34824	0.24968	1.0000
O	O35	1.0	0.46455	0.22306	0.33077	1.0000
O	O36	1.0	0.52958	0.42451	0.34020	1.0000

O	O37	1.0	0.35346	0.72143	0.30738	1.0000
O	O38	1.0	0.19834	0.62618	0.36028	1.0000
O	O39	1.0	0.52926	0.83801	0.31683	1.0000
O	O40	1.0	0.53194	0.63706	0.34116	1.0000
O	O41	1.0	0.35741	0.96333	0.31653	1.0000
O	O42	1.0	0.15827	0.02867	0.36160	1.0000
O	O43	1.0	0.54601	0.03296	0.34737	1.0000
O	O44	1.0	0.67112	0.61675	0.80944	1.0000
O	O45	1.0	0.82882	0.65654	0.74248	1.0000
O	O46	1.0	0.81585	0.77162	0.82584	1.0000
O	O47	1.0	0.86907	0.56326	0.82907	1.0000
O	O48	1.0	0.50472	0.65058	0.74933	1.0000
O	O49	1.0	0.54194	0.77643	0.82899	1.0000
O	O50	1.0	0.47116	0.57681	0.84050	1.0000
O	O51	1.0	0.64635	0.28834	0.80648	1.0000
O	O52	1.0	0.81357	0.16877	0.82655	1.0000
O	O53	1.0	0.80620	0.36810	0.85776	1.0000
O	O54	1.0	0.47602	0.16345	0.81765	1.0000
O	O55	1.0	0.46399	0.36381	0.84169	1.0000
O	O56	1.0	0.64691	0.03675	0.81195	1.0000
O	O57	1.0	0.82464	0.97091	0.85462	1.0000
O	O58	1.0	0.46203	0.96687	0.84728	1.0000
O	O59	1.0	0.62513	0.66948	0.93945	1.0000
O	O60	1.0	0.65999	0.82830	0.00663	1.0000
O	O61	1.0	0.77614	0.81891	0.92219	1.0000
O	O62	1.0	0.56774	0.86578	0.92012	1.0000
O	O63	1.0	0.65352	0.50318	0.00040	1.0000
O	O64	1.0	0.77959	0.53493	0.91946	1.0000
O	O65	1.0	0.57837	0.47032	0.90968	1.0000
O	O66	1.0	0.28047	0.64649	0.94292	1.0000
O	O67	1.0	0.37457	0.80221	0.89013	1.0000
O	O68	1.0	0.16382	0.47081	0.93315	1.0000
O	O69	1.0	0.36599	0.46728	0.91044	1.0000
O	O70	1.0	0.03857	0.64265	0.93407	1.0000

O	O71	1.0	0.97255	0.84034	0.88809	1.0000
O	O72	1.0	0.96953	0.45452	0.90207	1.0000
O	O73	1.0	0.38255	0.32909	0.44053	1.0000
O	O74	1.0	0.34304	0.17103	0.50734	1.0000
O	O75	1.0	0.22771	0.18440	0.42422	1.0000
O	O76	1.0	0.43632	0.13154	0.42061	1.0000
O	O77	1.0	0.34964	0.49408	0.50158	1.0000
O	O78	1.0	0.22359	0.45959	0.42178	1.0000
O	O79	1.0	0.42369	0.52932	0.41058	1.0000
O	O80	1.0	0.71253	0.35494	0.44393	1.0000
O	O81	1.0	0.83093	0.18760	0.42307	1.0000
O	O82	1.0	0.63126	0.19636	0.39226	1.0000
O	O83	1.0	0.83658	0.52627	0.43360	1.0000
O	O84	1.0	0.63688	0.53697	0.40847	1.0000
O	O85	1.0	0.96222	0.35473	0.43822	1.0000
O	O86	1.0	0.02893	0.17850	0.39451	1.0000
O	O87	1.0	0.03325	0.53971	0.40344	1.0000
O	O88	1.0	0.66682	0.36785	0.69786	1.0000
O	O89	1.0	0.82892	0.32529	0.75937	1.0000
O	O90	1.0	0.83764	0.26285	0.66245	1.0000
O	O91	1.0	0.48463	0.31333	0.74551	1.0000
O	O92	1.0	0.52820	0.23609	0.65446	1.0000
O	O93	1.0	0.48136	0.44227	0.66921	1.0000
O	O94	1.0	0.66239	0.71853	0.69008	1.0000
O	O95	1.0	0.83098	0.85116	0.69596	1.0000
O	O96	1.0	0.84293	0.66941	0.64383	1.0000
O	O97	1.0	0.48845	0.83204	0.69913	1.0000
O	O98	1.0	0.47803	0.64969	0.65023	1.0000
O	O99	1.0	0.65686	0.96768	0.69673	1.0000
O	O100	1.0	0.83550	0.04920	0.65703	1.0000
O	O101	1.0	0.47858	0.01091	0.64793	1.0000
O	O102	1.0	0.33254	0.62729	0.20062	1.0000
O	O103	1.0	0.17132	0.67411	0.26155	1.0000
O	O104	1.0	0.16767	0.74217	0.16549	1.0000

O	O105	1.0	0.51356	0.68766	0.24511	1.0000
O	O106	1.0	0.46370	0.76388	0.15416	1.0000
O	O107	1.0	0.51879	0.55965	0.16831	1.0000
O	O108	1.0	0.33824	0.28273	0.19117	1.0000
O	O109	1.0	0.16838	0.15041	0.19465	1.0000
O	O110	1.0	0.15944	0.33555	0.14489	1.0000
O	O111	1.0	0.51245	0.16822	0.19832	1.0000
O	O112	1.0	0.52126	0.35175	0.15038	1.0000
O	O113	1.0	0.34224	0.03572	0.19695	1.0000
O	O114	1.0	0.16812	0.95551	0.15333	1.0000
O	O115	1.0	0.51960	0.98842	0.14820	1.0000
O	O116	1.0	0.02362	0.82786	0.99740	1.0000
O	O117	1.0	0.01199	0.48315	0.00085	1.0000
O	O118	1.0	0.98025	0.17922	0.49355	1.0000
O	O119	1.0	0.98789	0.51740	0.50201	1.0000
O	O120	1.0	0.17306	0.97626	0.25265	1.0000
O	O121	1.0	0.51599	0.98872	0.24897	1.0000
O	O122	1.0	0.82152	0.01986	0.75571	1.0000
O	O123	1.0	0.48326	0.01273	0.74870	1.0000
O	O124	1.0	0.85664	0.46714	0.68884	1.0000
O	O125	1.0	0.46503	0.86056	0.06054	1.0000
O	O126	1.0	0.17850	0.82366	0.33274	1.0000
O	O127	1.0	0.13966	0.53595	0.18996	1.0000
O	O128	1.0	0.17731	0.82151	0.91777	1.0000
Al	Al1	1.0	0.45931	0.13525	0.62393	1.0000
Al	Al2	1.0	0.86390	0.53948	0.62599	1.0000
Al	Al3	1.0	0.53634	0.86423	0.12427	1.0000
Al	Al4	1.0	0.22154	0.96390	0.31284	1.0000
Al	Al5	1.0	0.13634	0.46433	0.12627	1.0000
Al	Al6	1.0	0.03690	0.77856	0.93735	1.0000
Si	Si1	1.0	0.33828	0.54222	0.06008	1.0000
Si	Si2	1.0	0.72667	0.79092	0.05871	1.0000
Si	Si3	1.0	0.71414	0.53311	0.05331	1.0000
Si	Si4	1.0	0.97175	0.78697	0.04986	1.0000

Si	Si5	1.0	0.95722	0.52790	0.05248	1.0000
Si	Si6	1.0	0.64965	0.20709	0.54806	1.0000
Si	Si7	1.0	0.66176	0.46033	0.55962	1.0000
Si	Si8	1.0	0.27266	0.20706	0.55839	1.0000
Si	Si9	1.0	0.28710	0.46487	0.55424	1.0000
Si	Si10	1.0	0.02807	0.21455	0.54841	1.0000
Si	Si11	1.0	0.04349	0.47295	0.55359	1.0000
Si	Si12	1.0	0.20548	0.34165	0.30346	1.0000
Si	Si13	1.0	0.45577	0.34276	0.30756	1.0000
Si	Si14	1.0	0.48375	0.72124	0.30220	1.0000
Si	Si15	1.0	0.48326	0.95721	0.30654	1.0000
Si	Si16	1.0	0.14765	0.51201	0.37923	1.0000
Si	Si17	1.0	0.79643	0.65374	0.80271	1.0000
Si	Si18	1.0	0.54738	0.65496	0.80690	1.0000
Si	Si19	1.0	0.77394	0.28753	0.81298	1.0000
Si	Si20	1.0	0.51770	0.28280	0.80262	1.0000
Si	Si21	1.0	0.77627	0.04766	0.81181	1.0000
Si	Si22	1.0	0.51861	0.04502	0.80539	1.0000
Si	Si23	1.0	0.85612	0.48071	0.87714	1.0000
Si	Si24	1.0	0.66001	0.79488	0.94687	1.0000
Si	Si25	1.0	0.65978	0.54414	0.94252	1.0000
Si	Si26	1.0	0.28020	0.51625	0.94846	1.0000
Si	Si27	1.0	0.04445	0.51662	0.94345	1.0000
Si	Si28	1.0	0.48918	0.85243	0.87150	1.0000
Si	Si29	1.0	0.34570	0.20376	0.44719	1.0000
Si	Si30	1.0	0.34499	0.45292	0.44376	1.0000
Si	Si31	1.0	0.71233	0.22742	0.43699	1.0000
Si	Si32	1.0	0.71714	0.48361	0.44792	1.0000
Si	Si33	1.0	0.95198	0.22537	0.43772	1.0000
Si	Si34	1.0	0.95495	0.48301	0.44528	1.0000
Si	Si35	1.0	0.51907	0.14594	0.37267	1.0000
Si	Si36	1.0	0.53928	0.33728	0.69067	1.0000
Si	Si37	1.0	0.79174	0.72655	0.69154	1.0000
Si	Si38	1.0	0.53389	0.71286	0.69660	1.0000

Si	Si39	1.0	0.78525	0.97151	0.70108	1.0000
Si	Si40	1.0	0.52680	0.95674	0.69697	1.0000
Si	Si41	1.0	0.45860	0.66231	0.19068	1.0000
Si	Si42	1.0	0.20894	0.27422	0.19180	1.0000
Si	Si43	1.0	0.46678	0.28707	0.19692	1.0000
Si	Si44	1.0	0.21304	0.02887	0.20022	1.0000
Si	Si45	1.0	0.47205	0.04381	0.19735	1.0000
Si	Si46	1.0	0.15880	0.84171	0.12519	1.0000
Si	Si47	1.0	0.53169	0.46910	0.12511	1.0000
Si	Si48	1.0	0.84011	0.15931	0.62475	1.0000
Si	Si49	1.0	0.46800	0.53160	0.62553	1.0000
Si	Si50	1.0	0.14955	0.15157	0.37699	1.0000
Si	Si51	1.0	0.53003	0.53080	0.37508	1.0000
Si	Si52	1.0	0.84982	0.85034	0.87271	1.0000
Si	Si53	1.0	0.47100	0.46998	0.87560	1.0000
Si	Si54	1.0	0.79299	0.34912	0.70183	1.0000
Si	Si55	1.0	0.34947	0.79347	0.04737	1.0000
Si	Si56	1.0	0.22850	0.70494	0.31451	1.0000
Si	Si57	1.0	0.20729	0.65129	0.20312	1.0000
Si	Si58	1.0	0.29606	0.77157	0.93594	1.0000

T1T7T7T7T7T9

data_image0

_chemical_formula_structural H6O128Al6Si58

_chemical_formula_sum "H6 O128 Al6 Si58"

_cell_length_a 12.5652

_cell_length_b 12.5234

_cell_length_c 26.4877

_cell_angle_alpha 90.2881

_cell_angle_beta 89.9101

_cell_angle_gamma 91.0571

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48127	0.13542	0.53288	1.0000
H	H2	1.0	0.85447	0.52683	0.71359	1.0000
H	H3	1.0	0.52551	0.85428	0.03613	1.0000
H	H4	1.0	0.13955	0.47819	0.21646	1.0000
H	H5	1.0	0.90245	0.02556	0.87069	1.0000
H	H6	1.0	0.82335	0.12930	0.38858	1.0000
O	O1	1.0	0.37082	0.66731	0.05297	1.0000
O	O2	1.0	0.33427	0.83004	0.99079	1.0000

:

O	O3	1.0	0.26277	0.83787	0.08634	1.0000
O	O4	1.0	0.31056	0.48746	0.00487	1.0000
O	O5	1.0	0.24345	0.52704	0.09790	1.0000
O	O6	1.0	0.44721	0.48034	0.07804	1.0000
O	O7	1.0	0.72070	0.65595	0.05925	1.0000
O	O8	1.0	0.84970	0.82763	0.05751	1.0000
O	O9	1.0	0.66818	0.83106	0.11001	1.0000
O	O10	1.0	0.83714	0.48382	0.05232	1.0000
O	O11	1.0	0.65247	0.47176	0.09895	1.0000
O	O12	1.0	0.96874	0.65590	0.05347	1.0000
O	O13	1.0	0.04929	0.83314	0.09458	1.0000
O	O14	1.0	0.01875	0.47622	0.09912	1.0000
O	O15	1.0	0.62649	0.32895	0.55010	1.0000
O	O16	1.0	0.67508	0.16827	0.48914	1.0000
O	O17	1.0	0.74003	0.16200	0.58553	1.0000
O	O18	1.0	0.53494	0.13664	0.56040	1.0000
O	O19	1.0	0.67686	0.51162	0.50475	1.0000
O	O20	1.0	0.76780	0.46022	0.59198	1.0000
O	O21	1.0	0.56195	0.51408	0.58647	1.0000
O	O22	1.0	0.28248	0.33803	0.55955	1.0000
O	O23	1.0	0.14868	0.16976	0.55577	1.0000
O	O24	1.0	0.33321	0.15836	0.60491	1.0000
O	O25	1.0	0.16919	0.51292	0.55341	1.0000
O	O26	1.0	0.35284	0.52020	0.60029	1.0000
O	O27	1.0	0.03402	0.34426	0.55451	1.0000
O	O28	1.0	0.95389	0.16843	0.59683	1.0000
O	O29	1.0	0.98810	0.52567	0.60127	1.0000
O	O30	1.0	0.32868	0.38024	0.30962	1.0000
O	O31	1.0	0.17031	0.34226	0.24306	1.0000
O	O32	1.0	0.18374	0.22657	0.32596	1.0000
O	O33	1.0	0.13182	0.43511	0.33028	1.0000
O	O34	1.0	0.49479	0.34915	0.24875	1.0000
O	O35	1.0	0.46090	0.22262	0.32871	1.0000
O	O36	1.0	0.52773	0.42332	0.33955	1.0000

O	O37	1.0	0.35458	0.71008	0.30651	1.0000
O	O38	1.0	0.18767	0.83006	0.32646	1.0000
O	O39	1.0	0.19379	0.63130	0.35758	1.0000
O	O40	1.0	0.52521	0.83488	0.31498	1.0000
O	O41	1.0	0.53631	0.63716	0.34279	1.0000
O	O42	1.0	0.35449	0.96159	0.31264	1.0000
O	O43	1.0	0.17645	0.02750	0.35510	1.0000
O	O44	1.0	0.53877	0.03087	0.34769	1.0000
O	O45	1.0	0.66675	0.61999	0.80643	1.0000
O	O46	1.0	0.82553	0.65247	0.73875	1.0000
O	O47	1.0	0.81401	0.77471	0.82070	1.0000
O	O48	1.0	0.86286	0.56515	0.82614	1.0000
O	O49	1.0	0.49663	0.65972	0.75099	1.0000
O	O50	1.0	0.53837	0.77719	0.83383	1.0000
O	O51	1.0	0.47050	0.57700	0.84086	1.0000
O	O52	1.0	0.65135	0.29527	0.80730	1.0000
O	O53	1.0	0.81867	0.17322	0.82318	1.0000
O	O54	1.0	0.81522	0.36885	0.85871	1.0000
O	O55	1.0	0.48990	0.16373	0.82068	1.0000
O	O56	1.0	0.46474	0.36532	0.83944	1.0000
O	O57	1.0	0.65631	0.03015	0.81621	1.0000
O	O58	1.0	0.46999	0.97069	0.85225	1.0000
O	O59	1.0	0.61981	0.66579	0.94380	1.0000
O	O60	1.0	0.65459	0.82485	0.01129	1.0000
O	O61	1.0	0.76280	0.82257	0.92487	1.0000
O	O62	1.0	0.55387	0.86015	0.92726	1.0000
O	O63	1.0	0.65962	0.49521	0.99957	1.0000
O	O64	1.0	0.77788	0.53918	0.91783	1.0000
O	O65	1.0	0.57864	0.46850	0.90914	1.0000
O	O66	1.0	0.29443	0.64960	0.94282	1.0000
O	O67	1.0	0.17179	0.81995	0.92828	1.0000
O	O68	1.0	0.36326	0.81198	0.89026	1.0000
O	O69	1.0	0.16561	0.48324	0.93109	1.0000
O	O70	1.0	0.36633	0.46353	0.90988	1.0000

O	O71	1.0	0.03879	0.65445	0.93802	1.0000
O	O72	1.0	0.97819	0.83797	0.89658	1.0000
O	O73	1.0	0.97255	0.47164	0.89904	1.0000
O	O74	1.0	0.37412	0.33035	0.43941	1.0000
O	O75	1.0	0.33936	0.17122	0.50623	1.0000
O	O76	1.0	0.22424	0.18081	0.42209	1.0000
O	O77	1.0	0.43253	0.13405	0.41980	1.0000
O	O78	1.0	0.34773	0.49654	0.50095	1.0000
O	O79	1.0	0.22167	0.46785	0.42024	1.0000
O	O80	1.0	0.42482	0.52866	0.41075	1.0000
O	O81	1.0	0.72086	0.35156	0.44377	1.0000
O	O82	1.0	0.62597	0.19626	0.39070	1.0000
O	O83	1.0	0.83600	0.52913	0.43675	1.0000
O	O84	1.0	0.63795	0.52944	0.40799	1.0000
O	O85	1.0	0.96143	0.35767	0.43404	1.0000
O	O86	1.0	0.02835	0.15817	0.38886	1.0000
O	O87	1.0	0.03002	0.54551	0.40224	1.0000
O	O88	1.0	0.66606	0.37624	0.69886	1.0000
O	O89	1.0	0.83083	0.33311	0.75882	1.0000
O	O90	1.0	0.83016	0.26140	0.66394	1.0000
O	O91	1.0	0.48958	0.30344	0.74464	1.0000
O	O92	1.0	0.53438	0.24337	0.65088	1.0000
O	O93	1.0	0.47630	0.44394	0.67265	1.0000
O	O94	1.0	0.65722	0.72230	0.69224	1.0000
O	O95	1.0	0.83009	0.84821	0.69294	1.0000
O	O96	1.0	0.82877	0.66648	0.63976	1.0000
O	O97	1.0	0.48430	0.83630	0.69733	1.0000
O	O98	1.0	0.47642	0.65007	0.65127	1.0000
O	O99	1.0	0.65730	0.96673	0.69681	1.0000
O	O100	1.0	0.83394	0.04827	0.65617	1.0000
O	O101	1.0	0.47838	0.02006	0.65196	1.0000
O	O102	1.0	0.33411	0.62305	0.19857	1.0000
O	O103	1.0	0.17285	0.67307	0.25918	1.0000
O	O104	1.0	0.16799	0.73498	0.16231	1.0000

O	O105	1.0	0.51578	0.67712	0.24577	1.0000
O	O106	1.0	0.46401	0.76705	0.15848	1.0000
O	O107	1.0	0.52159	0.56133	0.16465	1.0000
O	O108	1.0	0.33680	0.28031	0.19085	1.0000
O	O109	1.0	0.16971	0.14702	0.19664	1.0000
O	O110	1.0	0.15712	0.32784	0.14437	1.0000
O	O111	1.0	0.51186	0.16874	0.19768	1.0000
O	O112	1.0	0.51800	0.35161	0.14933	1.0000
O	O113	1.0	0.34475	0.03158	0.19618	1.0000
O	O114	1.0	0.16579	0.94884	0.15777	1.0000
O	O115	1.0	0.52531	0.98806	0.14844	1.0000
O	O116	1.0	0.01695	0.82504	0.99629	1.0000
O	O117	1.0	0.01196	0.48612	0.99830	1.0000
O	O118	1.0	0.97552	0.17504	0.49793	1.0000
O	O119	1.0	0.99322	0.51729	0.50078	1.0000
O	O120	1.0	0.18153	0.97916	0.25607	1.0000
O	O121	1.0	0.51732	0.99087	0.24904	1.0000
O	O122	1.0	0.82430	0.01585	0.75427	1.0000
O	O123	1.0	0.49143	0.01036	0.75288	1.0000
O	O124	1.0	0.85679	0.46951	0.68681	1.0000
O	O125	1.0	0.46975	0.85612	0.06325	1.0000
O	O126	1.0	0.14162	0.53129	0.18863	1.0000
O	O127	1.0	0.84629	0.98325	0.85418	1.0000
O	O128	1.0	0.82375	0.17720	0.41773	1.0000
Al	Al1	1.0	0.46203	0.13999	0.62374	1.0000
Al	Al2	1.0	0.86173	0.53788	0.62327	1.0000
Al	Al3	1.0	0.53936	0.86097	0.12632	1.0000
Al	Al4	1.0	0.13979	0.45781	0.12570	1.0000
Al	Al5	1.0	0.84958	0.83969	0.87565	1.0000
Al	Al6	1.0	0.96307	0.22172	0.43745	1.0000
Si	Si1	1.0	0.34062	0.53970	0.05946	1.0000
Si	Si2	1.0	0.72619	0.78540	0.06108	1.0000
Si	Si3	1.0	0.71742	0.52727	0.05294	1.0000
Si	Si4	1.0	0.97076	0.78463	0.05050	1.0000

Si	Si5	1.0	0.96033	0.52572	0.05175	1.0000
Si	Si6	1.0	0.65072	0.20373	0.54750	1.0000
Si	Si7	1.0	0.66073	0.45535	0.55963	1.0000
Si	Si8	1.0	0.27249	0.20885	0.55820	1.0000
Si	Si9	1.0	0.28752	0.46655	0.55390	1.0000
Si	Si10	1.0	0.02764	0.21500	0.55026	1.0000
Si	Si11	1.0	0.04473	0.47430	0.55318	1.0000
Si	Si12	1.0	0.20347	0.34456	0.30304	1.0000
Si	Si13	1.0	0.45268	0.34382	0.30641	1.0000
Si	Si14	1.0	0.22713	0.71109	0.31270	1.0000
Si	Si15	1.0	0.48294	0.71459	0.30213	1.0000
Si	Si16	1.0	0.22551	0.95101	0.31206	1.0000
Si	Si17	1.0	0.48239	0.95423	0.30506	1.0000
Si	Si18	1.0	0.14422	0.51943	0.37769	1.0000
Si	Si19	1.0	0.79185	0.65679	0.79921	1.0000
Si	Si20	1.0	0.54332	0.65885	0.80803	1.0000
Si	Si21	1.0	0.77849	0.29450	0.81220	1.0000
Si	Si22	1.0	0.52312	0.28295	0.80265	1.0000
Si	Si23	1.0	0.52661	0.04293	0.80946	1.0000
Si	Si24	1.0	0.85596	0.48771	0.87548	1.0000
Si	Si25	1.0	0.65200	0.79263	0.95075	1.0000
Si	Si26	1.0	0.65906	0.54240	0.94276	1.0000
Si	Si27	1.0	0.29011	0.77749	0.93788	1.0000
Si	Si28	1.0	0.28439	0.52115	0.94743	1.0000
Si	Si29	1.0	0.04874	0.78438	0.93955	1.0000
Si	Si30	1.0	0.04680	0.52581	0.94256	1.0000
Si	Si31	1.0	0.48216	0.85289	0.87610	1.0000
Si	Si32	1.0	0.33991	0.20485	0.44654	1.0000
Si	Si33	1.0	0.34119	0.45628	0.44284	1.0000
Si	Si34	1.0	0.71858	0.48219	0.44865	1.0000
Si	Si35	1.0	0.95626	0.48367	0.44418	1.0000
Si	Si36	1.0	0.51205	0.14636	0.37136	1.0000
Si	Si37	1.0	0.54056	0.33967	0.69065	1.0000
Si	Si38	1.0	0.78596	0.72460	0.68917	1.0000

Si	Si39	1.0	0.52889	0.71643	0.69766	1.0000
Si	Si40	1.0	0.78528	0.96850	0.69899	1.0000
Si	Si41	1.0	0.52726	0.95919	0.69865	1.0000
Si	Si42	1.0	0.45976	0.65958	0.19074	1.0000
Si	Si43	1.0	0.20794	0.27171	0.19216	1.0000
Si	Si44	1.0	0.46500	0.28747	0.19594	1.0000
Si	Si45	1.0	0.21668	0.02700	0.20123	1.0000
Si	Si46	1.0	0.47450	0.04381	0.19664	1.0000
Si	Si47	1.0	0.16096	0.83893	0.12511	1.0000
Si	Si48	1.0	0.53365	0.46727	0.12288	1.0000
Si	Si49	1.0	0.84068	0.15992	0.62521	1.0000
Si	Si50	1.0	0.46760	0.53083	0.62745	1.0000
Si	Si51	1.0	0.15072	0.14826	0.37296	1.0000
Si	Si52	1.0	0.53036	0.52921	0.37530	1.0000
Si	Si53	1.0	0.47102	0.46980	0.87513	1.0000
Si	Si54	1.0	0.79181	0.35435	0.70139	1.0000
Si	Si55	1.0	0.35286	0.79373	0.04860	1.0000
Si	Si56	1.0	0.20885	0.64726	0.20167	1.0000
Si	Si57	1.0	0.78131	0.05264	0.80873	1.0000
Si	Si58	1.0	0.70480	0.22646	0.43620	1.0000

T2T2T7T7T7T9

data_image0

_chemical_formula_structural H6O128Al6Si58

_chemical_formula_sum "H6 O128 Al6 Si58"

_cell_length_a 12.5599

_cell_length_b 12.5646

_cell_length_c 26.5478

_cell_angle_alpha 90.0523

_cell_angle_beta 89.6901

_cell_angle_gamma 90.2314

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48603	0.14948	0.53234	1.0000
H	H2	1.0	0.86162	0.51387	0.71583	1.0000
H	H3	1.0	0.56770	0.83554	0.34558	1.0000
H	H4	1.0	0.06453	0.01992	0.14296	1.0000
H	H5	1.0	0.47786	0.84597	0.95923	1.0000
H	H6	1.0	0.16714	0.41410	0.91444	1.0000
O	O1	1.0	0.30224	0.67245	0.05936	1.0000
O	O2	1.0	0.34446	0.81898	0.98772	1.0000

O	O3	1.0	0.24144	0.87158	0.07357	1.0000
O	O4	1.0	0.44930	0.82348	0.07121	1.0000
O	O5	1.0	0.33747	0.50256	0.00151	1.0000
O	O6	1.0	0.21834	0.48406	0.08241	1.0000
O	O7	1.0	0.42757	0.51454	0.08950	1.0000
O	O8	1.0	0.67852	0.65632	0.06306	1.0000
O	O9	1.0	0.82987	0.80760	0.06958	1.0000
O	O10	1.0	0.64138	0.84436	0.10500	1.0000
O	O11	1.0	0.82668	0.50437	0.06840	1.0000
O	O12	1.0	0.63103	0.46193	0.09275	1.0000
O	O13	1.0	0.97597	0.65531	0.06166	1.0000
O	O14	1.0	0.02213	0.84030	0.10413	1.0000
O	O15	1.0	0.01228	0.47177	0.10665	1.0000
O	O16	1.0	0.64010	0.33540	0.55183	1.0000
O	O17	1.0	0.68704	0.17631	0.48936	1.0000
O	O18	1.0	0.74167	0.16103	0.58618	1.0000
O	O19	1.0	0.53999	0.14854	0.55959	1.0000
O	O20	1.0	0.67978	0.51184	0.49971	1.0000
O	O21	1.0	0.77360	0.47756	0.58899	1.0000
O	O22	1.0	0.56418	0.52086	0.58077	1.0000
O	O23	1.0	0.28467	0.33175	0.57043	1.0000
O	O24	1.0	0.15532	0.16397	0.55594	1.0000
O	O25	1.0	0.33760	0.14411	0.60596	1.0000
O	O26	1.0	0.17535	0.50452	0.55012	1.0000
O	O27	1.0	0.35634	0.52216	0.60077	1.0000
O	O28	1.0	0.04000	0.33893	0.55276	1.0000
O	O29	1.0	0.95527	0.15973	0.58981	1.0000
O	O30	1.0	0.99937	0.51143	0.60616	1.0000
O	O31	1.0	0.34481	0.38052	0.30942	1.0000
O	O32	1.0	0.16891	0.34549	0.25556	1.0000
O	O33	1.0	0.21044	0.22388	0.33426	1.0000
O	O34	1.0	0.15355	0.42849	0.34568	1.0000
O	O35	1.0	0.50361	0.32750	0.24597	1.0000
O	O36	1.0	0.48411	0.23205	0.33420	1.0000

O	O37	1.0	0.54420	0.43697	0.32799	1.0000
O	O38	1.0	0.33778	0.72905	0.30482	1.0000
O	O39	1.0	0.15633	0.83247	0.31448	1.0000
O	O40	1.0	0.17562	0.64077	0.35237	1.0000
O	O41	1.0	0.49971	0.63673	0.35356	1.0000
O	O42	1.0	0.32367	0.96604	0.31189	1.0000
O	O43	1.0	0.13793	0.02713	0.35003	1.0000
O	O44	1.0	0.52549	0.03016	0.35216	1.0000
O	O45	1.0	0.68039	0.62711	0.81011	1.0000
O	O46	1.0	0.83439	0.66235	0.74164	1.0000
O	O47	1.0	0.84241	0.75813	0.83172	1.0000
O	O48	1.0	0.87181	0.54792	0.82042	1.0000
O	O49	1.0	0.51965	0.65062	0.74643	1.0000
O	O50	1.0	0.53233	0.76891	0.83127	1.0000
O	O51	1.0	0.48521	0.56331	0.83295	1.0000
O	O52	1.0	0.65739	0.32217	0.80871	1.0000
O	O53	1.0	0.79661	0.16186	0.82421	1.0000
O	O54	1.0	0.83660	0.35252	0.85554	1.0000
O	O55	1.0	0.51571	0.16635	0.81431	1.0000
O	O56	1.0	0.46540	0.35467	0.84548	1.0000
O	O57	1.0	0.65574	0.00648	0.80958	1.0000
O	O58	1.0	0.84548	0.96644	0.84829	1.0000
O	O59	1.0	0.46077	0.98026	0.84612	1.0000
O	O60	1.0	0.63731	0.66424	0.93990	1.0000
O	O61	1.0	0.66895	0.82567	0.00512	1.0000
O	O62	1.0	0.74015	0.84049	0.91049	1.0000
O	O63	1.0	0.67874	0.49676	0.99699	1.0000
O	O64	1.0	0.78244	0.52409	0.91060	1.0000
O	O65	1.0	0.57482	0.47077	0.91259	1.0000
O	O66	1.0	0.26198	0.65373	0.94140	1.0000
O	O67	1.0	0.15207	0.83340	0.94225	1.0000
O	O68	1.0	0.33341	0.81685	0.88858	1.0000
O	O69	1.0	0.36332	0.48102	0.90345	1.0000
O	O70	1.0	0.02765	0.66229	0.94529	1.0000

O	O71	1.0	0.95399	0.84288	0.90735	1.0000
O	O72	1.0	0.98415	0.46574	0.89642	1.0000
O	O73	1.0	0.31777	0.32207	0.43598	1.0000
O	O74	1.0	0.34500	0.17608	0.50857	1.0000
O	O75	1.0	0.24249	0.12942	0.42264	1.0000
O	O76	1.0	0.45491	0.15884	0.42670	1.0000
O	O77	1.0	0.36225	0.47112	0.50495	1.0000
O	O78	1.0	0.24873	0.51861	0.42431	1.0000
O	O79	1.0	0.45531	0.47702	0.41686	1.0000
O	O80	1.0	0.71045	0.35346	0.43583	1.0000
O	O81	1.0	0.84570	0.19254	0.42283	1.0000
O	O82	1.0	0.65040	0.17630	0.39075	1.0000
O	O83	1.0	0.84250	0.52127	0.43490	1.0000
O	O84	1.0	0.65192	0.54063	0.40051	1.0000
O	O85	1.0	0.97479	0.35648	0.44110	1.0000
O	O86	1.0	0.04569	0.18584	0.39525	1.0000
O	O87	1.0	0.04095	0.54475	0.40982	1.0000
O	O88	1.0	0.67231	0.36238	0.69554	1.0000
O	O89	1.0	0.83532	0.31344	0.75634	1.0000
O	O90	1.0	0.84477	0.26116	0.65918	1.0000
O	O91	1.0	0.49351	0.32286	0.74691	1.0000
O	O92	1.0	0.52727	0.23688	0.65577	1.0000
O	O93	1.0	0.48931	0.44527	0.66809	1.0000
O	O94	1.0	0.67164	0.72047	0.68476	1.0000
O	O95	1.0	0.84136	0.85009	0.69284	1.0000
O	O96	1.0	0.85470	0.66642	0.64324	1.0000
O	O97	1.0	0.49759	0.83374	0.69842	1.0000
O	O98	1.0	0.48524	0.65263	0.64865	1.0000
O	O99	1.0	0.66677	0.96520	0.69542	1.0000
O	O100	1.0	0.84277	0.04651	0.65405	1.0000
O	O101	1.0	0.49425	0.00959	0.64517	1.0000
O	O102	1.0	0.34134	0.62604	0.19484	1.0000
O	O103	1.0	0.17220	0.66233	0.25346	1.0000
O	O104	1.0	0.20247	0.77880	0.17066	1.0000

O	O105	1.0	0.14701	0.57198	0.16689	1.0000
O	O106	1.0	0.50894	0.66826	0.25339	1.0000
O	O107	1.0	0.48941	0.76692	0.16633	1.0000
O	O108	1.0	0.53606	0.55855	0.17105	1.0000
O	O109	1.0	0.32747	0.28861	0.19577	1.0000
O	O110	1.0	0.15327	0.17193	0.19789	1.0000
O	O111	1.0	0.14800	0.36032	0.15633	1.0000
O	O112	1.0	0.49178	0.16055	0.18284	1.0000
O	O113	1.0	0.49798	0.35508	0.14695	1.0000
O	O114	1.0	0.32057	0.03624	0.18925	1.0000
O	O115	1.0	0.49224	0.97039	0.14177	1.0000
O	O116	1.0	0.98754	0.82947	0.00483	1.0000
O	O117	1.0	0.99343	0.47828	0.00699	1.0000
O	O118	1.0	0.99411	0.17638	0.49274	1.0000
O	O119	1.0	0.98854	0.51678	0.50626	1.0000
O	O120	1.0	0.15617	0.99453	0.25190	1.0000
O	O121	1.0	0.49509	0.98958	0.24234	1.0000
O	O122	1.0	0.83084	0.02108	0.75202	1.0000
O	O123	1.0	0.49278	0.01656	0.74637	1.0000
O	O124	1.0	0.85747	0.46277	0.68746	1.0000
O	O125	1.0	0.51452	0.83074	0.31900	1.0000
O	O126	1.0	0.13327	0.99019	0.15239	1.0000
O	O127	1.0	0.53214	0.84627	0.93158	1.0000
O	O128	1.0	0.17088	0.47016	0.93989	1.0000
Al	Al1	1.0	0.46873	0.13399	0.62345	1.0000
Al	Al2	1.0	0.87136	0.53652	0.62502	1.0000
Al	Al3	1.0	0.45887	0.96720	0.30399	1.0000
Al	Al4	1.0	0.15204	0.85548	0.12260	1.0000
Al	Al5	1.0	0.45865	0.85305	0.86827	1.0000
Al	Al6	1.0	0.03225	0.52703	0.94946	1.0000
Si	Si1	1.0	0.33135	0.79826	0.04896	1.0000
Si	Si2	1.0	0.32130	0.54476	0.05928	1.0000
Si	Si3	1.0	0.70610	0.78272	0.06068	1.0000
Si	Si4	1.0	0.70525	0.53074	0.05474	1.0000

Si	Si5	1.0	0.95570	0.78303	0.06027	1.0000
Si	Si6	1.0	0.95258	0.52781	0.05922	1.0000
Si	Si7	1.0	0.51694	0.85131	0.12162	1.0000
Si	Si8	1.0	0.65811	0.20954	0.54675	1.0000
Si	Si9	1.0	0.66756	0.46331	0.55665	1.0000
Si	Si10	1.0	0.27801	0.20384	0.56171	1.0000
Si	Si11	1.0	0.29394	0.45743	0.55729	1.0000
Si	Si12	1.0	0.03618	0.21111	0.54846	1.0000
Si	Si13	1.0	0.05083	0.46839	0.55523	1.0000
Si	Si14	1.0	0.21962	0.34415	0.31190	1.0000
Si	Si15	1.0	0.46921	0.34311	0.30453	1.0000
Si	Si16	1.0	0.20810	0.71603	0.30607	1.0000
Si	Si17	1.0	0.19736	0.95489	0.30756	1.0000
Si	Si18	1.0	0.15523	0.53171	0.38279	1.0000
Si	Si19	1.0	0.80596	0.65184	0.80165	1.0000
Si	Si20	1.0	0.55406	0.65639	0.80524	1.0000
Si	Si21	1.0	0.78071	0.28599	0.81122	1.0000
Si	Si22	1.0	0.53244	0.29012	0.80291	1.0000
Si	Si23	1.0	0.78074	0.03831	0.80816	1.0000
Si	Si24	1.0	0.52987	0.04006	0.80411	1.0000
Si	Si25	1.0	0.86961	0.47292	0.87101	1.0000
Si	Si26	1.0	0.66949	0.53798	0.93937	1.0000
Si	Si27	1.0	0.27062	0.78381	0.93822	1.0000
Si	Si28	1.0	0.02989	0.78906	0.94990	1.0000
Si	Si29	1.0	0.33947	0.19660	0.44788	1.0000
Si	Si30	1.0	0.34549	0.44742	0.44578	1.0000
Si	Si31	1.0	0.72363	0.22548	0.43477	1.0000
Si	Si32	1.0	0.72135	0.48125	0.44380	1.0000
Si	Si33	1.0	0.96558	0.22816	0.43849	1.0000
Si	Si34	1.0	0.96212	0.48402	0.44879	1.0000
Si	Si35	1.0	0.52848	0.14748	0.37567	1.0000
Si	Si36	1.0	0.54364	0.33904	0.69063	1.0000
Si	Si37	1.0	0.80035	0.72697	0.68938	1.0000
Si	Si38	1.0	0.54404	0.71466	0.69443	1.0000

Si	Si39	1.0	0.79441	0.97002	0.69831	1.0000
Si	Si40	1.0	0.53705	0.95708	0.69574	1.0000
Si	Si41	1.0	0.21565	0.66321	0.19529	1.0000
Si	Si42	1.0	0.46745	0.65552	0.19509	1.0000
Si	Si43	1.0	0.19975	0.29354	0.20137	1.0000
Si	Si44	1.0	0.45605	0.28235	0.19302	1.0000
Si	Si45	1.0	0.45198	0.03785	0.19051	1.0000
Si	Si46	1.0	0.13182	0.47368	0.12822	1.0000
Si	Si47	1.0	0.52279	0.47273	0.12521	1.0000
Si	Si48	1.0	0.84641	0.15639	0.62260	1.0000
Si	Si49	1.0	0.47479	0.53446	0.62469	1.0000
Si	Si50	1.0	0.15928	0.14203	0.37586	1.0000
Si	Si51	1.0	0.53741	0.52071	0.37472	1.0000
Si	Si52	1.0	0.84661	0.85046	0.87460	1.0000
Si	Si53	1.0	0.47592	0.46847	0.87322	1.0000
Si	Si54	1.0	0.79803	0.34372	0.70000	1.0000
Si	Si55	1.0	0.46264	0.70788	0.30678	1.0000
Si	Si56	1.0	0.19663	0.05125	0.20114	1.0000
Si	Si57	1.0	0.65103	0.79136	0.94709	1.0000
Si	Si58	1.0	0.29086	0.53106	0.94675	1.0000

T2T7T7T7T7T9

data_image0

_chemical_formula_structural H₆O₁₂₈Al₆Si₅₈

_chemical_formula_sum "H₆ O₁₂₈ Al₆ Si₅₈"

_cell_length_a 12.5819

_cell_length_b 12.515

_cell_length_c 26.5294

_cell_angle_alpha 89.7471

_cell_angle_beta 90.1765

_cell_angle_gamma 90.1434

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48315	0.13797	0.53423	1.0000
H	H2	1.0	0.85713	0.51605	0.71482	1.0000
H	H3	1.0	0.58137	0.83452	0.34421	1.0000
H	H4	1.0	0.08740	0.01975	0.13351	1.0000
H	H5	1.0	0.47704	0.85123	0.95828	1.0000
H	H6	1.0	0.15036	0.52706	0.29158	1.0000
O	O1	1.0	0.37228	0.66563	0.05362	1.0000
O	O2	1.0	0.34246	0.82407	0.98525	1.0000

O	O3	1.0	0.24246	0.82877	0.07482	1.0000
O	O4	1.0	0.45240	0.85787	0.06521	1.0000
O	O5	1.0	0.33002	0.48589	0.00323	1.0000
O	O6	1.0	0.21746	0.53750	0.08469	1.0000
O	O7	1.0	0.41728	0.47371	0.09259	1.0000
O	O8	1.0	0.70388	0.65259	0.05928	1.0000
O	O9	1.0	0.83129	0.82296	0.06615	1.0000
O	O10	1.0	0.64185	0.82679	0.10561	1.0000
O	O11	1.0	0.83046	0.48468	0.06853	1.0000
O	O12	1.0	0.63009	0.46706	0.09137	1.0000
O	O13	1.0	0.95945	0.65447	0.06120	1.0000
O	O14	1.0	0.02453	0.83760	0.10172	1.0000
O	O15	1.0	0.02146	0.47543	0.10551	1.0000
O	O16	1.0	0.62878	0.33383	0.55353	1.0000
O	O17	1.0	0.67804	0.17406	0.49152	1.0000
O	O18	1.0	0.73793	0.16134	0.58787	1.0000
O	O19	1.0	0.53523	0.14399	0.56220	1.0000
O	O20	1.0	0.66877	0.51501	0.50332	1.0000
O	O21	1.0	0.77074	0.46830	0.58956	1.0000
O	O22	1.0	0.56386	0.52167	0.58682	1.0000
O	O23	1.0	0.28368	0.33136	0.56187	1.0000
O	O24	1.0	0.14972	0.16482	0.55621	1.0000
O	O25	1.0	0.33183	0.15065	0.60768	1.0000
O	O26	1.0	0.17181	0.50781	0.55367	1.0000
O	O27	1.0	0.35502	0.51597	0.60108	1.0000
O	O28	1.0	0.03542	0.34166	0.55599	1.0000
O	O29	1.0	0.95166	0.15977	0.59146	1.0000
O	O30	1.0	0.99203	0.52119	0.60296	1.0000
O	O31	1.0	0.34063	0.37966	0.30542	1.0000
O	O32	1.0	0.17469	0.34035	0.24404	1.0000
O	O33	1.0	0.17578	0.26158	0.33745	1.0000
O	O34	1.0	0.51101	0.31547	0.25447	1.0000
O	O35	1.0	0.45900	0.22162	0.34050	1.0000
O	O36	1.0	0.53647	0.42236	0.33780	1.0000

O	O37	1.0	0.34962	0.74196	0.30085	1.0000
O	O38	1.0	0.17050	0.84882	0.31047	1.0000
O	O39	1.0	0.19898	0.66564	0.36183	1.0000
O	O40	1.0	0.51406	0.63279	0.34303	1.0000
O	O41	1.0	0.33874	0.97989	0.31095	1.0000
O	O42	1.0	0.15205	0.04981	0.34326	1.0000
O	O43	1.0	0.54492	0.02901	0.34962	1.0000
O	O44	1.0	0.67457	0.61366	0.80905	1.0000
O	O45	1.0	0.82836	0.65300	0.74121	1.0000
O	O46	1.0	0.82684	0.75867	0.82814	1.0000
O	O47	1.0	0.87221	0.54987	0.82399	1.0000
O	O48	1.0	0.50842	0.64825	0.74922	1.0000
O	O49	1.0	0.53806	0.76464	0.83338	1.0000
O	O50	1.0	0.47740	0.56222	0.83713	1.0000
O	O51	1.0	0.65823	0.32557	0.81337	1.0000
O	O52	1.0	0.79290	0.15892	0.82512	1.0000
O	O53	1.0	0.84391	0.34905	0.85619	1.0000
O	O54	1.0	0.52357	0.16408	0.81916	1.0000
O	O55	1.0	0.46216	0.35173	0.84680	1.0000
O	O56	1.0	0.65480	0.99901	0.81208	1.0000
O	O57	1.0	0.84553	0.96345	0.85080	1.0000
O	O58	1.0	0.45703	0.97595	0.84525	1.0000
O	O59	1.0	0.63003	0.66043	0.94174	1.0000
O	O60	1.0	0.66320	0.82393	0.00519	1.0000
O	O61	1.0	0.73990	0.83321	0.91199	1.0000
O	O62	1.0	0.68180	0.48938	0.99668	1.0000
O	O63	1.0	0.76535	0.51739	0.90748	1.0000
O	O64	1.0	0.55827	0.46727	0.91810	1.0000
O	O65	1.0	0.27015	0.64807	0.94622	1.0000
O	O66	1.0	0.15130	0.82154	0.93756	1.0000
O	O67	1.0	0.33329	0.80660	0.88617	1.0000
O	O68	1.0	0.15766	0.47288	0.94530	1.0000
O	O69	1.0	0.34848	0.47173	0.90409	1.0000
O	O70	1.0	0.03116	0.64862	0.94772	1.0000

O	O71	1.0	0.95123	0.82115	0.90405	1.0000
O	O72	1.0	0.97022	0.46937	0.90557	1.0000
O	O73	1.0	0.37517	0.31760	0.44187	1.0000
O	O74	1.0	0.33862	0.16143	0.50895	1.0000
O	O75	1.0	0.23857	0.15888	0.42001	1.0000
O	O76	1.0	0.44836	0.12304	0.42820	1.0000
O	O77	1.0	0.35161	0.48583	0.50256	1.0000
O	O78	1.0	0.23041	0.46208	0.41876	1.0000
O	O79	1.0	0.43445	0.51224	0.41452	1.0000
O	O80	1.0	0.70844	0.35599	0.44219	1.0000
O	O81	1.0	0.83506	0.19013	0.42461	1.0000
O	O82	1.0	0.63709	0.19035	0.39342	1.0000
O	O83	1.0	0.83396	0.52639	0.43982	1.0000
O	O84	1.0	0.64325	0.54085	0.40438	1.0000
O	O85	1.0	0.96426	0.35701	0.43701	1.0000
O	O86	1.0	0.03293	0.17500	0.39730	1.0000
O	O87	1.0	0.02299	0.54727	0.40242	1.0000
O	O88	1.0	0.67035	0.36417	0.69633	1.0000
O	O89	1.0	0.83176	0.31333	0.75770	1.0000
O	O90	1.0	0.84184	0.25882	0.66126	1.0000
O	O91	1.0	0.49668	0.31626	0.74931	1.0000
O	O92	1.0	0.52551	0.23711	0.65690	1.0000
O	O93	1.0	0.48356	0.44495	0.67252	1.0000
O	O94	1.0	0.66161	0.71760	0.68865	1.0000
O	O95	1.0	0.83328	0.84548	0.69464	1.0000
O	O96	1.0	0.83951	0.66435	0.64253	1.0000
O	O97	1.0	0.49165	0.83484	0.70221	1.0000
O	O98	1.0	0.47414	0.65270	0.65153	1.0000
O	O99	1.0	0.66194	0.96531	0.69491	1.0000
O	O100	1.0	0.84019	0.04380	0.65543	1.0000
O	O101	1.0	0.48463	0.00932	0.64702	1.0000
O	O102	1.0	0.33738	0.62803	0.19626	1.0000
O	O103	1.0	0.17850	0.65645	0.26266	1.0000
O	O104	1.0	0.18662	0.77348	0.17764	1.0000

O	O105	1.0	0.14167	0.56210	0.17751	1.0000
O	O106	1.0	0.51371	0.68430	0.24529	1.0000
O	O107	1.0	0.46536	0.77872	0.15835	1.0000
O	O108	1.0	0.52947	0.57592	0.16214	1.0000
O	O109	1.0	0.34661	0.29285	0.19326	1.0000
O	O110	1.0	0.17491	0.17315	0.18215	1.0000
O	O111	1.0	0.17853	0.36652	0.14388	1.0000
O	O112	1.0	0.50979	0.16237	0.18489	1.0000
O	O113	1.0	0.53085	0.36278	0.15864	1.0000
O	O114	1.0	0.33969	0.03398	0.18193	1.0000
O	O115	1.0	0.52055	0.97953	0.13993	1.0000
O	O116	1.0	0.99077	0.82211	0.00194	1.0000
O	O117	1.0	0.99222	0.48080	0.00567	1.0000
O	O118	1.0	0.98513	0.18223	0.49449	1.0000
O	O119	1.0	0.99490	0.51537	0.50208	1.0000
O	O120	1.0	0.17676	0.01010	0.24666	1.0000
O	O121	1.0	0.50713	0.98455	0.24023	1.0000
O	O122	1.0	0.82644	0.01669	0.75351	1.0000
O	O123	1.0	0.49374	0.02206	0.74748	1.0000
O	O124	1.0	0.85712	0.46173	0.68749	1.0000
O	O125	1.0	0.52913	0.83263	0.31700	1.0000
O	O126	1.0	0.15036	0.98346	0.14669	1.0000
O	O127	1.0	0.53076	0.84705	0.93076	1.0000
O	O128	1.0	0.15256	0.47132	0.31878	1.0000
Al	Al1	1.0	0.46246	0.13547	0.62535	1.0000
Al	Al2	1.0	0.86525	0.53551	0.62428	1.0000
Al	Al3	1.0	0.47330	0.96885	0.30239	1.0000
Al	Al4	1.0	0.15334	0.84108	0.12310	1.0000
Al	Al5	1.0	0.45749	0.84803	0.86725	1.0000
Al	Al6	1.0	0.15130	0.54350	0.38246	1.0000
Si	Si1	1.0	0.34725	0.79350	0.04573	1.0000
Si	Si2	1.0	0.33445	0.54156	0.05826	1.0000
Si	Si3	1.0	0.71097	0.78139	0.05903	1.0000
Si	Si4	1.0	0.71207	0.52434	0.05358	1.0000

Si	Si5	1.0	0.95375	0.78451	0.05820	1.0000
Si	Si6	1.0	0.95141	0.52552	0.05959	1.0000
Si	Si7	1.0	0.52006	0.85980	0.11744	1.0000
Si	Si8	1.0	0.65123	0.20793	0.54899	1.0000
Si	Si9	1.0	0.66085	0.46106	0.55943	1.0000
Si	Si10	1.0	0.27345	0.20224	0.56030	1.0000
Si	Si11	1.0	0.29051	0.46004	0.55544	1.0000
Si	Si12	1.0	0.03077	0.21380	0.55003	1.0000
Si	Si13	1.0	0.04748	0.47189	0.55447	1.0000
Si	Si14	1.0	0.46260	0.33393	0.31026	1.0000
Si	Si15	1.0	0.22160	0.72969	0.31116	1.0000
Si	Si16	1.0	0.21291	0.97186	0.30390	1.0000
Si	Si17	1.0	0.79843	0.64608	0.80120	1.0000
Si	Si18	1.0	0.54906	0.65012	0.80734	1.0000
Si	Si19	1.0	0.78038	0.28459	0.81282	1.0000
Si	Si20	1.0	0.53437	0.28864	0.80627	1.0000
Si	Si21	1.0	0.77869	0.03419	0.80983	1.0000
Si	Si22	1.0	0.53043	0.03822	0.80587	1.0000
Si	Si23	1.0	0.86177	0.47159	0.87324	1.0000
Si	Si24	1.0	0.65855	0.53284	0.94015	1.0000
Si	Si25	1.0	0.27267	0.77606	0.93666	1.0000
Si	Si26	1.0	0.27771	0.51958	0.94895	1.0000
Si	Si27	1.0	0.03120	0.77831	0.94769	1.0000
Si	Si28	1.0	0.03825	0.51950	0.95124	1.0000
Si	Si29	1.0	0.34759	0.19160	0.44917	1.0000
Si	Si30	1.0	0.34422	0.44451	0.44480	1.0000
Si	Si31	1.0	0.71550	0.22800	0.43805	1.0000
Si	Si32	1.0	0.71459	0.48458	0.44831	1.0000
Si	Si33	1.0	0.95533	0.22833	0.43900	1.0000
Si	Si34	1.0	0.95663	0.48667	0.44531	1.0000
Si	Si35	1.0	0.52342	0.13907	0.37823	1.0000
Si	Si36	1.0	0.54209	0.33784	0.69278	1.0000
Si	Si37	1.0	0.79027	0.72280	0.69016	1.0000
Si	Si38	1.0	0.53402	0.71373	0.69752	1.0000

Si	Si39	1.0	0.78943	0.96735	0.69929	1.0000
Si	Si40	1.0	0.53233	0.95815	0.69723	1.0000
Si	Si41	1.0	0.21101	0.65923	0.20211	1.0000
Si	Si42	1.0	0.46016	0.66731	0.18954	1.0000
Si	Si43	1.0	0.21905	0.29468	0.19056	1.0000
Si	Si44	1.0	0.47478	0.28286	0.19783	1.0000
Si	Si45	1.0	0.47047	0.03889	0.18852	1.0000
Si	Si46	1.0	0.14068	0.48620	0.12773	1.0000
Si	Si47	1.0	0.52571	0.47129	0.12588	1.0000
Si	Si48	1.0	0.84340	0.15507	0.62410	1.0000
Si	Si49	1.0	0.46963	0.53308	0.62798	1.0000
Si	Si50	1.0	0.15089	0.16025	0.37504	1.0000
Si	Si51	1.0	0.53150	0.52388	0.37590	1.0000
Si	Si52	1.0	0.84154	0.84344	0.87376	1.0000
Si	Si53	1.0	0.46257	0.46429	0.87619	1.0000
Si	Si54	1.0	0.79585	0.34376	0.70082	1.0000
Si	Si55	1.0	0.47347	0.71393	0.30107	1.0000
Si	Si56	1.0	0.21609	0.05234	0.19274	1.0000
Si	Si57	1.0	0.64678	0.78792	0.94717	1.0000
Si	Si58	1.0	0.21396	0.35710	0.30183	1.0000

T2T7T7T7T9T9

data_image0

_chemical_formula_structural H₆O₁₂₈Al₆Si₅₈

_chemical_formula_sum "H₆ O₁₂₈ Al₆ Si₅₈"

_cell_length_a 12.5819

_cell_length_b 12.515

_cell_length_c 26.5294

_cell_angle_alpha 89.7471

_cell_angle_beta 90.1765

_cell_angle_gamma 90.1434

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48315	0.13797	0.53423	1.0000
H	H2	1.0	0.85713	0.51605	0.71482	1.0000
H	H3	1.0	0.58137	0.83452	0.34421	1.0000
H	H4	1.0	0.08740	0.01975	0.13351	1.0000
H	H5	1.0	0.47704	0.85123	0.95828	1.0000
H	H6	1.0	0.15036	0.52706	0.29158	1.0000
O	O1	1.0	0.37228	0.66563	0.05362	1.0000
O	O2	1.0	0.34246	0.82407	0.98525	1.0000

O	O3	1.0	0.24246	0.82877	0.07482	1.0000
O	O4	1.0	0.45240	0.85787	0.06521	1.0000
O	O5	1.0	0.33002	0.48589	0.00323	1.0000
O	O6	1.0	0.21746	0.53750	0.08469	1.0000
O	O7	1.0	0.41728	0.47371	0.09259	1.0000
O	O8	1.0	0.70388	0.65259	0.05928	1.0000
O	O9	1.0	0.83129	0.82296	0.06615	1.0000
O	O10	1.0	0.64185	0.82679	0.10561	1.0000
O	O11	1.0	0.83046	0.48468	0.06853	1.0000
O	O12	1.0	0.63009	0.46706	0.09137	1.0000
O	O13	1.0	0.95945	0.65447	0.06120	1.0000
O	O14	1.0	0.02453	0.83760	0.10172	1.0000
O	O15	1.0	0.02146	0.47543	0.10551	1.0000
O	O16	1.0	0.62878	0.33383	0.55353	1.0000
O	O17	1.0	0.67804	0.17406	0.49152	1.0000
O	O18	1.0	0.73793	0.16134	0.58787	1.0000
O	O19	1.0	0.53523	0.14399	0.56220	1.0000
O	O20	1.0	0.66877	0.51501	0.50332	1.0000
O	O21	1.0	0.77074	0.46830	0.58956	1.0000
O	O22	1.0	0.56386	0.52167	0.58682	1.0000
O	O23	1.0	0.28368	0.33136	0.56187	1.0000
O	O24	1.0	0.14972	0.16482	0.55621	1.0000
O	O25	1.0	0.33183	0.15065	0.60768	1.0000
O	O26	1.0	0.17181	0.50781	0.55367	1.0000
O	O27	1.0	0.35502	0.51597	0.60108	1.0000
O	O28	1.0	0.03542	0.34166	0.55599	1.0000
O	O29	1.0	0.95166	0.15977	0.59146	1.0000
O	O30	1.0	0.99203	0.52119	0.60296	1.0000
O	O31	1.0	0.34063	0.37966	0.30542	1.0000
O	O32	1.0	0.17469	0.34035	0.24404	1.0000
O	O33	1.0	0.17578	0.26158	0.33745	1.0000
O	O34	1.0	0.51101	0.31547	0.25447	1.0000
O	O35	1.0	0.45900	0.22162	0.34050	1.0000
O	O36	1.0	0.53647	0.42236	0.33780	1.0000

O	O37	1.0	0.34962	0.74196	0.30085	1.0000
O	O38	1.0	0.17050	0.84882	0.31047	1.0000
O	O39	1.0	0.19898	0.66564	0.36183	1.0000
O	O40	1.0	0.51406	0.63279	0.34303	1.0000
O	O41	1.0	0.33874	0.97989	0.31095	1.0000
O	O42	1.0	0.15205	0.04981	0.34326	1.0000
O	O43	1.0	0.54492	0.02901	0.34962	1.0000
O	O44	1.0	0.67457	0.61366	0.80905	1.0000
O	O45	1.0	0.82836	0.65300	0.74121	1.0000
O	O46	1.0	0.82684	0.75867	0.82814	1.0000
O	O47	1.0	0.87221	0.54987	0.82399	1.0000
O	O48	1.0	0.50842	0.64825	0.74922	1.0000
O	O49	1.0	0.53806	0.76464	0.83338	1.0000
O	O50	1.0	0.47740	0.56222	0.83713	1.0000
O	O51	1.0	0.65823	0.32557	0.81337	1.0000
O	O52	1.0	0.79290	0.15892	0.82512	1.0000
O	O53	1.0	0.84391	0.34905	0.85619	1.0000
O	O54	1.0	0.52357	0.16408	0.81916	1.0000
O	O55	1.0	0.46216	0.35173	0.84680	1.0000
O	O56	1.0	0.65480	0.99901	0.81208	1.0000
O	O57	1.0	0.84553	0.96345	0.85080	1.0000
O	O58	1.0	0.45703	0.97595	0.84525	1.0000
O	O59	1.0	0.63003	0.66043	0.94174	1.0000
O	O60	1.0	0.66320	0.82393	0.00519	1.0000
O	O61	1.0	0.73990	0.83321	0.91199	1.0000
O	O62	1.0	0.68180	0.48938	0.99668	1.0000
O	O63	1.0	0.76535	0.51739	0.90748	1.0000
O	O64	1.0	0.55827	0.46727	0.91810	1.0000
O	O65	1.0	0.27015	0.64807	0.94622	1.0000
O	O66	1.0	0.15130	0.82154	0.93756	1.0000
O	O67	1.0	0.33329	0.80660	0.88617	1.0000
O	O68	1.0	0.15766	0.47288	0.94530	1.0000
O	O69	1.0	0.34848	0.47173	0.90409	1.0000
O	O70	1.0	0.03116	0.64862	0.94772	1.0000

O	O71	1.0	0.95123	0.82115	0.90405	1.0000
O	O72	1.0	0.97022	0.46937	0.90557	1.0000
O	O73	1.0	0.37517	0.31760	0.44187	1.0000
O	O74	1.0	0.33862	0.16143	0.50895	1.0000
O	O75	1.0	0.23857	0.15888	0.42001	1.0000
O	O76	1.0	0.44836	0.12304	0.42820	1.0000
O	O77	1.0	0.35161	0.48583	0.50256	1.0000
O	O78	1.0	0.23041	0.46208	0.41876	1.0000
O	O79	1.0	0.43445	0.51224	0.41452	1.0000
O	O80	1.0	0.70844	0.35599	0.44219	1.0000
O	O81	1.0	0.83506	0.19013	0.42461	1.0000
O	O82	1.0	0.63709	0.19035	0.39342	1.0000
O	O83	1.0	0.83396	0.52639	0.43982	1.0000
O	O84	1.0	0.64325	0.54085	0.40438	1.0000
O	O85	1.0	0.96426	0.35701	0.43701	1.0000
O	O86	1.0	0.03293	0.17500	0.39730	1.0000
O	O87	1.0	0.02299	0.54727	0.40242	1.0000
O	O88	1.0	0.67035	0.36417	0.69633	1.0000
O	O89	1.0	0.83176	0.31333	0.75770	1.0000
O	O90	1.0	0.84184	0.25882	0.66126	1.0000
O	O91	1.0	0.49668	0.31626	0.74931	1.0000
O	O92	1.0	0.52551	0.23711	0.65690	1.0000
O	O93	1.0	0.48356	0.44495	0.67252	1.0000
O	O94	1.0	0.66161	0.71760	0.68865	1.0000
O	O95	1.0	0.83328	0.84548	0.69464	1.0000
O	O96	1.0	0.83951	0.66435	0.64253	1.0000
O	O97	1.0	0.49165	0.83484	0.70221	1.0000
O	O98	1.0	0.47414	0.65270	0.65153	1.0000
O	O99	1.0	0.66194	0.96531	0.69491	1.0000
O	O100	1.0	0.84019	0.04380	0.65543	1.0000
O	O101	1.0	0.48463	0.00932	0.64702	1.0000
O	O102	1.0	0.33738	0.62803	0.19626	1.0000
O	O103	1.0	0.17850	0.65645	0.26266	1.0000
O	O104	1.0	0.18662	0.77348	0.17764	1.0000

O	O105	1.0	0.14167	0.56210	0.17751	1.0000
O	O106	1.0	0.51371	0.68430	0.24529	1.0000
O	O107	1.0	0.46536	0.77872	0.15835	1.0000
O	O108	1.0	0.52947	0.57592	0.16214	1.0000
O	O109	1.0	0.34661	0.29285	0.19326	1.0000
O	O110	1.0	0.17491	0.17315	0.18215	1.0000
O	O111	1.0	0.17853	0.36652	0.14388	1.0000
O	O112	1.0	0.50979	0.16237	0.18489	1.0000
O	O113	1.0	0.53085	0.36278	0.15864	1.0000
O	O114	1.0	0.33969	0.03398	0.18193	1.0000
O	O115	1.0	0.52055	0.97953	0.13993	1.0000
O	O116	1.0	0.99077	0.82211	0.00194	1.0000
O	O117	1.0	0.99222	0.48080	0.00567	1.0000
O	O118	1.0	0.98513	0.18223	0.49449	1.0000
O	O119	1.0	0.99490	0.51537	0.50208	1.0000
O	O120	1.0	0.17676	0.01010	0.24666	1.0000
O	O121	1.0	0.50713	0.98455	0.24023	1.0000
O	O122	1.0	0.82644	0.01669	0.75351	1.0000
O	O123	1.0	0.49374	0.02206	0.74748	1.0000
O	O124	1.0	0.85712	0.46173	0.68749	1.0000
O	O125	1.0	0.52913	0.83263	0.31700	1.0000
O	O126	1.0	0.15036	0.98346	0.14669	1.0000
O	O127	1.0	0.53076	0.84705	0.93076	1.0000
O	O128	1.0	0.15256	0.47132	0.31878	1.0000
Al	Al1	1.0	0.46246	0.13547	0.62535	1.0000
Al	Al2	1.0	0.86525	0.53551	0.62428	1.0000
Al	Al3	1.0	0.47330	0.96885	0.30239	1.0000
Al	Al4	1.0	0.15334	0.84108	0.12310	1.0000
Al	Al5	1.0	0.45749	0.84803	0.86725	1.0000
Al	Al6	1.0	0.15130	0.54350	0.38246	1.0000
Si	Si1	1.0	0.34725	0.79350	0.04573	1.0000
Si	Si2	1.0	0.33445	0.54156	0.05826	1.0000
Si	Si3	1.0	0.71097	0.78139	0.05903	1.0000
Si	Si4	1.0	0.71207	0.52434	0.05358	1.0000

Si	Si5	1.0	0.95375	0.78451	0.05820	1.0000
Si	Si6	1.0	0.95141	0.52552	0.05959	1.0000
Si	Si7	1.0	0.52006	0.85980	0.11744	1.0000
Si	Si8	1.0	0.65123	0.20793	0.54899	1.0000
Si	Si9	1.0	0.66085	0.46106	0.55943	1.0000
Si	Si10	1.0	0.27345	0.20224	0.56030	1.0000
Si	Si11	1.0	0.29051	0.46004	0.55544	1.0000
Si	Si12	1.0	0.03077	0.21380	0.55003	1.0000
Si	Si13	1.0	0.04748	0.47189	0.55447	1.0000
Si	Si14	1.0	0.46260	0.33393	0.31026	1.0000
Si	Si15	1.0	0.22160	0.72969	0.31116	1.0000
Si	Si16	1.0	0.21291	0.97186	0.30390	1.0000
Si	Si17	1.0	0.79843	0.64608	0.80120	1.0000
Si	Si18	1.0	0.54906	0.65012	0.80734	1.0000
Si	Si19	1.0	0.78038	0.28459	0.81282	1.0000
Si	Si20	1.0	0.53437	0.28864	0.80627	1.0000
Si	Si21	1.0	0.77869	0.03419	0.80983	1.0000
Si	Si22	1.0	0.53043	0.03822	0.80587	1.0000
Si	Si23	1.0	0.86177	0.47159	0.87324	1.0000
Si	Si24	1.0	0.65855	0.53284	0.94015	1.0000
Si	Si25	1.0	0.27267	0.77606	0.93666	1.0000
Si	Si26	1.0	0.27771	0.51958	0.94895	1.0000
Si	Si27	1.0	0.03120	0.77831	0.94769	1.0000
Si	Si28	1.0	0.03825	0.51950	0.95124	1.0000
Si	Si29	1.0	0.34759	0.19160	0.44917	1.0000
Si	Si30	1.0	0.34422	0.44451	0.44480	1.0000
Si	Si31	1.0	0.71550	0.22800	0.43805	1.0000
Si	Si32	1.0	0.71459	0.48458	0.44831	1.0000
Si	Si33	1.0	0.95533	0.22833	0.43900	1.0000
Si	Si34	1.0	0.95663	0.48667	0.44531	1.0000
Si	Si35	1.0	0.52342	0.13907	0.37823	1.0000
Si	Si36	1.0	0.54209	0.33784	0.69278	1.0000
Si	Si37	1.0	0.79027	0.72280	0.69016	1.0000
Si	Si38	1.0	0.53402	0.71373	0.69752	1.0000

Si	Si39	1.0	0.78943	0.96735	0.69929	1.0000
Si	Si40	1.0	0.53233	0.95815	0.69723	1.0000
Si	Si41	1.0	0.21101	0.65923	0.20211	1.0000
Si	Si42	1.0	0.46016	0.66731	0.18954	1.0000
Si	Si43	1.0	0.21905	0.29468	0.19056	1.0000
Si	Si44	1.0	0.47478	0.28286	0.19783	1.0000
Si	Si45	1.0	0.47047	0.03889	0.18852	1.0000
Si	Si46	1.0	0.14068	0.48620	0.12773	1.0000
Si	Si47	1.0	0.52571	0.47129	0.12588	1.0000
Si	Si48	1.0	0.84340	0.15507	0.62410	1.0000
Si	Si49	1.0	0.46963	0.53308	0.62798	1.0000
Si	Si50	1.0	0.15089	0.16025	0.37504	1.0000
Si	Si51	1.0	0.53150	0.52388	0.37590	1.0000
Si	Si52	1.0	0.84154	0.84344	0.87376	1.0000
Si	Si53	1.0	0.46257	0.46429	0.87619	1.0000
Si	Si54	1.0	0.79585	0.34376	0.70082	1.0000
Si	Si55	1.0	0.47347	0.71393	0.30107	1.0000
Si	Si56	1.0	0.21609	0.05234	0.19274	1.0000
Si	Si57	1.0	0.64678	0.78792	0.94717	1.0000
Si	Si58	1.0	0.21396	0.35710	0.30183	1.0000

T7T7T7T7T9T9

data_image0
_chemical_formula_structural H6O128Al6Si58
_chemical_formula_sum "H6 O128 Al6 Si58"
_cell_length_a 12.5938
_cell_length_b 12.5372
_cell_length_c 26.4935
_cell_angle_alpha 89.9775
_cell_angle_beta 89.9595
_cell_angle_gamma 90.8959

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H H1 1.0 0.47451 0.14075 0.53587 1.0000
H H2 1.0 0.85642 0.52707 0.71294 1.0000
H H3 1.0 0.52584 0.85951 0.03582 1.0000
H H4 1.0 0.14266 0.47332 0.21313 1.0000
H H5 1.0 0.90673 0.02384 0.86781 1.0000
H H6 1.0 0.09068 0.97721 0.36606 1.0000
O O1 1.0 0.37889 0.66887 0.05093 1.0000
O O2 1.0 0.33573 0.83156 0.98989 1.0000

:

O	O3	1.0	0.26331	0.83431	0.08517	1.0000
O	O4	1.0	0.31842	0.48822	0.00484	1.0000
O	O5	1.0	0.23978	0.53922	0.09453	1.0000
O	O6	1.0	0.44287	0.48098	0.08297	1.0000
O	O7	1.0	0.72264	0.65569	0.05622	1.0000
O	O8	1.0	0.85025	0.82665	0.05721	1.0000
O	O9	1.0	0.66865	0.82625	0.10942	1.0000
O	O10	1.0	0.83544	0.48155	0.05477	1.0000
O	O11	1.0	0.64981	0.47763	0.09984	1.0000
O	O12	1.0	0.96768	0.65324	0.05378	1.0000
O	O13	1.0	0.04976	0.83022	0.09366	1.0000
O	O14	1.0	0.02042	0.47077	0.09725	1.0000
O	O15	1.0	0.62188	0.33131	0.55141	1.0000
O	O16	1.0	0.66502	0.16906	0.49014	1.0000
O	O17	1.0	0.73650	0.16516	0.58556	1.0000
O	O18	1.0	0.53006	0.14023	0.56296	1.0000
O	O19	1.0	0.67970	0.51186	0.50440	1.0000
O	O20	1.0	0.76149	0.46223	0.59366	1.0000
O	O21	1.0	0.55774	0.51918	0.58336	1.0000
O	O22	1.0	0.27879	0.34310	0.55786	1.0000
O	O23	1.0	0.14999	0.17282	0.55725	1.0000
O	O24	1.0	0.33122	0.17017	0.60956	1.0000
O	O25	1.0	0.16565	0.51699	0.55427	1.0000
O	O26	1.0	0.35056	0.52287	0.59985	1.0000
O	O27	1.0	0.03246	0.34606	0.55350	1.0000
O	O28	1.0	0.95014	0.16900	0.59344	1.0000
O	O29	1.0	0.98133	0.52817	0.59770	1.0000
O	O30	1.0	0.33541	0.37926	0.30516	1.0000
O	O31	1.0	0.17528	0.34555	0.23853	1.0000
O	O32	1.0	0.18821	0.22684	0.32121	1.0000
O	O33	1.0	0.14062	0.43659	0.32552	1.0000
O	O34	1.0	0.50633	0.33835	0.25018	1.0000
O	O35	1.0	0.46434	0.22378	0.33361	1.0000
O	O36	1.0	0.53018	0.42509	0.33919	1.0000

O	O37	1.0	0.34594	0.70277	0.30779	1.0000
O	O38	1.0	0.18034	0.82806	0.32192	1.0000
O	O39	1.0	0.17933	0.63401	0.35813	1.0000
O	O40	1.0	0.50655	0.83628	0.31860	1.0000
O	O41	1.0	0.53254	0.63774	0.34183	1.0000
O	O42	1.0	0.34233	0.97162	0.31737	1.0000
O	O43	1.0	0.52953	0.02873	0.35233	1.0000
O	O44	1.0	0.66630	0.62112	0.80593	1.0000
O	O45	1.0	0.82494	0.65427	0.73833	1.0000
O	O46	1.0	0.81386	0.77405	0.82064	1.0000
O	O47	1.0	0.86139	0.56430	0.82536	1.0000
O	O48	1.0	0.49625	0.65955	0.75017	1.0000
O	O49	1.0	0.53594	0.77630	0.83313	1.0000
O	O50	1.0	0.47123	0.57482	0.83964	1.0000
O	O51	1.0	0.65365	0.29771	0.80798	1.0000
O	O52	1.0	0.81923	0.17238	0.82215	1.0000
O	O53	1.0	0.82068	0.36685	0.85777	1.0000
O	O54	1.0	0.49320	0.16384	0.81893	1.0000
O	O55	1.0	0.46675	0.36231	0.84197	1.0000
O	O56	1.0	0.65756	0.02882	0.81687	1.0000
O	O57	1.0	0.47099	0.97111	0.85245	1.0000
O	O58	1.0	0.62494	0.66533	0.94407	1.0000
O	O59	1.0	0.65561	0.82668	0.01060	1.0000
O	O60	1.0	0.76234	0.82551	0.92403	1.0000
O	O61	1.0	0.55258	0.85704	0.92678	1.0000
O	O62	1.0	0.66066	0.49275	0.99971	1.0000
O	O63	1.0	0.77907	0.53418	0.91753	1.0000
O	O64	1.0	0.57782	0.47008	0.90995	1.0000
O	O65	1.0	0.29254	0.65053	0.94322	1.0000
O	O66	1.0	0.17153	0.82135	0.92838	1.0000
O	O67	1.0	0.36221	0.81207	0.88956	1.0000
O	O68	1.0	0.16625	0.48189	0.93421	1.0000
O	O69	1.0	0.36504	0.46582	0.90903	1.0000
O	O70	1.0	0.04120	0.65398	0.93778	1.0000

O	O71	1.0	0.97808	0.83679	0.89610	1.0000
O	O72	1.0	0.97578	0.47349	0.89732	1.0000
O	O73	1.0	0.37390	0.33290	0.44338	1.0000
O	O74	1.0	0.34473	0.17305	0.51078	1.0000
O	O75	1.0	0.23754	0.17115	0.42438	1.0000
O	O76	1.0	0.44769	0.14164	0.42701	1.0000
O	O77	1.0	0.34116	0.50455	0.49992	1.0000
O	O78	1.0	0.22165	0.46666	0.41789	1.0000
O	O79	1.0	0.42353	0.52822	0.40999	1.0000
O	O80	1.0	0.70748	0.34986	0.44291	1.0000
O	O81	1.0	0.82880	0.17895	0.42841	1.0000
O	O82	1.0	0.63811	0.18741	0.38984	1.0000
O	O83	1.0	0.83427	0.51860	0.43477	1.0000
O	O84	1.0	0.63647	0.53462	0.40817	1.0000
O	O85	1.0	0.95867	0.34629	0.43843	1.0000
O	O86	1.0	0.02203	0.16451	0.39575	1.0000
O	O87	1.0	0.02471	0.52608	0.39751	1.0000
O	O88	1.0	0.66804	0.37837	0.69874	1.0000
O	O89	1.0	0.83223	0.33236	0.75780	1.0000
O	O90	1.0	0.83225	0.26379	0.66244	1.0000
O	O91	1.0	0.49139	0.31275	0.74606	1.0000
O	O92	1.0	0.53713	0.24146	0.65443	1.0000
O	O93	1.0	0.47844	0.44411	0.67014	1.0000
O	O94	1.0	0.65641	0.72246	0.69143	1.0000
O	O95	1.0	0.82771	0.84994	0.69204	1.0000
O	O96	1.0	0.82830	0.66880	0.63937	1.0000
O	O97	1.0	0.48447	0.83656	0.69651	1.0000
O	O98	1.0	0.47538	0.65091	0.65065	1.0000
O	O99	1.0	0.65579	0.96930	0.69428	1.0000
O	O100	1.0	0.83390	0.05058	0.65503	1.0000
O	O101	1.0	0.47211	0.02131	0.65299	1.0000
O	O102	1.0	0.33159	0.62094	0.19912	1.0000
O	O103	1.0	0.16727	0.66742	0.25800	1.0000
O	O104	1.0	0.16830	0.73669	0.16271	1.0000

O	O105	1.0	0.50836	0.68721	0.24587	1.0000
O	O106	1.0	0.46168	0.75784	0.15420	1.0000
O	O107	1.0	0.52116	0.55554	0.17006	1.0000
O	O108	1.0	0.34471	0.27745	0.19232	1.0000
O	O109	1.0	0.17356	0.15013	0.19187	1.0000
O	O110	1.0	0.17392	0.33164	0.13951	1.0000
O	O111	1.0	0.51662	0.16274	0.19543	1.0000
O	O112	1.0	0.52473	0.34901	0.15037	1.0000
O	O113	1.0	0.34537	0.03014	0.19264	1.0000
O	O114	1.0	0.16630	0.94996	0.15437	1.0000
O	O115	1.0	0.53050	0.97682	0.15328	1.0000
O	O116	1.0	0.01622	0.82260	0.99587	1.0000
O	O117	1.0	0.00431	0.48514	0.99688	1.0000
O	O118	1.0	0.98451	0.17665	0.49566	1.0000
O	O119	1.0	0.99618	0.51540	0.49720	1.0000
O	O120	1.0	0.18059	0.98206	0.25205	1.0000
O	O121	1.0	0.50537	0.99339	0.25323	1.0000
O	O122	1.0	0.82157	0.01727	0.75276	1.0000
O	O123	1.0	0.49360	0.00741	0.75326	1.0000
O	O124	1.0	0.85835	0.47065	0.68605	1.0000
O	O125	1.0	0.47023	0.85984	0.06291	1.0000
O	O126	1.0	0.14105	0.52956	0.18619	1.0000
O	O127	1.0	0.84901	0.98243	0.85234	1.0000
O	O128	1.0	0.14959	0.01819	0.35131	1.0000
Al	Al1	1.0	0.46014	0.14365	0.62618	1.0000
Al	Al2	1.0	0.85772	0.53997	0.62247	1.0000
Al	Al3	1.0	0.54017	0.85469	0.12605	1.0000
Al	Al4	1.0	0.14350	0.46020	0.12259	1.0000
Al	Al5	1.0	0.84978	0.83979	0.87504	1.0000
Al	Al6	1.0	0.15058	0.16001	0.37507	1.0000
Si	Si1	1.0	0.34284	0.54342	0.05928	1.0000
Si	Si2	1.0	0.72698	0.78453	0.05994	1.0000
Si	Si3	1.0	0.71668	0.52703	0.05306	1.0000
Si	Si4	1.0	0.97042	0.78191	0.05006	1.0000

Si	Si5	1.0	0.95818	0.52308	0.05151	1.0000
Si	Si6	1.0	0.64496	0.20565	0.54786	1.0000
Si	Si7	1.0	0.65744	0.45706	0.55918	1.0000
Si	Si8	1.0	0.27345	0.21408	0.56039	1.0000
Si	Si9	1.0	0.28441	0.47160	0.55333	1.0000
Si	Si10	1.0	0.02981	0.21737	0.54991	1.0000
Si	Si11	1.0	0.04267	0.47622	0.55156	1.0000
Si	Si12	1.0	0.21034	0.34346	0.29876	1.0000
Si	Si13	1.0	0.45875	0.34105	0.30706	1.0000
Si	Si14	1.0	0.21891	0.70607	0.31149	1.0000
Si	Si15	1.0	0.47393	0.71541	0.30306	1.0000
Si	Si16	1.0	0.47143	0.95800	0.30936	1.0000
Si	Si17	1.0	0.14288	0.51423	0.37495	1.0000
Si	Si18	1.0	0.79113	0.65712	0.79871	1.0000
Si	Si19	1.0	0.54267	0.65847	0.80723	1.0000
Si	Si20	1.0	0.78071	0.29431	0.81146	1.0000
Si	Si21	1.0	0.52569	0.28470	0.80325	1.0000
Si	Si22	1.0	0.52837	0.04224	0.80934	1.0000
Si	Si23	1.0	0.85792	0.48627	0.87465	1.0000
Si	Si24	1.0	0.65295	0.79285	0.95029	1.0000
Si	Si25	1.0	0.66104	0.54106	0.94289	1.0000
Si	Si26	1.0	0.28979	0.77840	0.93754	1.0000
Si	Si27	1.0	0.28551	0.52197	0.94802	1.0000
Si	Si28	1.0	0.04912	0.78369	0.93915	1.0000
Si	Si29	1.0	0.04676	0.52537	0.94244	1.0000
Si	Si30	1.0	0.48124	0.85213	0.87555	1.0000
Si	Si31	1.0	0.34678	0.20544	0.45030	1.0000
Si	Si32	1.0	0.33974	0.45767	0.44288	1.0000
Si	Si33	1.0	0.71054	0.22192	0.43762	1.0000
Si	Si34	1.0	0.71460	0.47845	0.44779	1.0000
Si	Si35	1.0	0.95115	0.21658	0.43916	1.0000
Si	Si36	1.0	0.95366	0.47491	0.44286	1.0000
Si	Si37	1.0	0.51913	0.14739	0.37576	1.0000
Si	Si38	1.0	0.54265	0.34224	0.69117	1.0000

Si	Si39	1.0	0.78482	0.72615	0.68865	1.0000
Si	Si40	1.0	0.52839	0.71664	0.69682	1.0000
Si	Si41	1.0	0.78350	0.97052	0.69741	1.0000
Si	Si42	1.0	0.52620	0.95950	0.69814	1.0000
Si	Si43	1.0	0.45679	0.65727	0.19114	1.0000
Si	Si44	1.0	0.21640	0.27403	0.18892	1.0000
Si	Si45	1.0	0.47287	0.28270	0.19671	1.0000
Si	Si46	1.0	0.21777	0.02945	0.19666	1.0000
Si	Si47	1.0	0.47481	0.03989	0.19760	1.0000
Si	Si48	1.0	0.16151	0.83769	0.12359	1.0000
Si	Si49	1.0	0.53368	0.46709	0.12569	1.0000
Si	Si50	1.0	0.83866	0.16219	0.62370	1.0000
Si	Si51	1.0	0.46644	0.53292	0.62589	1.0000
Si	Si52	1.0	0.52964	0.53010	0.37506	1.0000
Si	Si53	1.0	0.47126	0.46957	0.87541	1.0000
Si	Si54	1.0	0.79337	0.35534	0.70041	1.0000
Si	Si55	1.0	0.35541	0.79450	0.04759	1.0000
Si	Si56	1.0	0.20637	0.64462	0.20060	1.0000
Si	Si57	1.0	0.78158	0.05237	0.80780	1.0000
Si	Si58	1.0	0.21865	0.94786	0.30749	1.0000

AlSiAl-T1T7T7T7T7T9

data_image0

_chemical_formula_structural H₆O₁₂₈Al₆Si₅₈

_chemical_formula_sum "H₆ O₁₂₈ Al₆ Si₅₈"

_cell_length_a 12.5503

_cell_length_b 12.5522

_cell_length_c 26.4687

_cell_angle_alpha 89.805

_cell_angle_beta 89.7669

_cell_angle_gamma 91.0225

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48052	0.14015	0.53290	1.0000
H	H2	1.0	0.85861	0.51598	0.71726	1.0000
H	H3	1.0	0.52609	0.85558	0.03202	1.0000
H	H4	1.0	0.12268	0.82220	0.35945	1.0000
H	H5	1.0	0.13676	0.48370	0.21762	1.0000
H	H6	1.0	0.09302	0.01498	0.13772	1.0000
O	O1	1.0	0.37382	0.67080	0.04850	1.0000
O	O2	1.0	0.32922	0.83188	0.98673	1.0000

O	O3	1.0	0.26715	0.84108	0.08422	1.0000
O	O4	1.0	0.30896	0.48841	0.00636	1.0000
O	O5	1.0	0.23839	0.54215	0.09758	1.0000
O	O6	1.0	0.44063	0.48480	0.08150	1.0000
O	O7	1.0	0.71563	0.66045	0.05885	1.0000
O	O8	1.0	0.84257	0.83270	0.04963	1.0000
O	O9	1.0	0.66435	0.83975	0.10495	1.0000
O	O10	1.0	0.83203	0.48761	0.05260	1.0000
O	O11	1.0	0.64750	0.47795	0.09950	1.0000
O	O12	1.0	0.96084	0.66037	0.05044	1.0000
O	O13	1.0	0.03603	0.84155	0.09059	1.0000
O	O14	1.0	0.01398	0.48623	0.10065	1.0000
O	O15	1.0	0.63014	0.33240	0.55229	1.0000
O	O16	1.0	0.67578	0.17243	0.49039	1.0000
O	O17	1.0	0.73678	0.16202	0.58745	1.0000
O	O18	1.0	0.53333	0.14185	0.56081	1.0000
O	O19	1.0	0.68217	0.51507	0.50517	1.0000
O	O20	1.0	0.76635	0.46734	0.59443	1.0000
O	O21	1.0	0.55957	0.51776	0.58374	1.0000
O	O22	1.0	0.28090	0.33380	0.56051	1.0000
O	O23	1.0	0.14874	0.16597	0.55312	1.0000
O	O24	1.0	0.32982	0.15218	0.60538	1.0000
O	O25	1.0	0.16945	0.50885	0.55213	1.0000
O	O26	1.0	0.35129	0.51553	0.60189	1.0000
O	O27	1.0	0.03391	0.34110	0.55321	1.0000
O	O28	1.0	0.95028	0.16158	0.59097	1.0000
O	O29	1.0	0.99066	0.51684	0.60409	1.0000
O	O30	1.0	0.33156	0.38139	0.31031	1.0000
O	O31	1.0	0.16987	0.34942	0.24507	1.0000
O	O32	1.0	0.18501	0.22774	0.32722	1.0000
O	O33	1.0	0.13553	0.43566	0.33324	1.0000
O	O34	1.0	0.49772	0.34687	0.24947	1.0000
O	O35	1.0	0.46522	0.22714	0.33176	1.0000
O	O36	1.0	0.53037	0.42911	0.33881	1.0000

O	O37	1.0	0.35286	0.72487	0.30882	1.0000
O	O38	1.0	0.20042	0.62841	0.36373	1.0000
O	O39	1.0	0.52868	0.84033	0.31540	1.0000
O	O40	1.0	0.53067	0.64144	0.34325	1.0000
O	O41	1.0	0.35581	0.96478	0.31737	1.0000
O	O42	1.0	0.15555	0.03116	0.36076	1.0000
O	O43	1.0	0.54556	0.03589	0.34506	1.0000
O	O44	1.0	0.66696	0.61768	0.80961	1.0000
O	O45	1.0	0.82525	0.65689	0.74248	1.0000
O	O46	1.0	0.81672	0.76498	0.82838	1.0000
O	O47	1.0	0.86316	0.55607	0.82641	1.0000
O	O48	1.0	0.50300	0.64977	0.74864	1.0000
O	O49	1.0	0.53371	0.77407	0.82884	1.0000
O	O50	1.0	0.46797	0.57300	0.83979	1.0000
O	O51	1.0	0.65034	0.29530	0.80878	1.0000
O	O52	1.0	0.81181	0.16303	0.82625	1.0000
O	O53	1.0	0.81787	0.35963	0.85860	1.0000
O	O54	1.0	0.48731	0.16179	0.81892	1.0000
O	O55	1.0	0.46256	0.36079	0.84175	1.0000
O	O56	1.0	0.65099	0.02524	0.81301	1.0000
O	O57	1.0	0.83471	0.96586	0.85347	1.0000
O	O58	1.0	0.46127	0.96678	0.84655	1.0000
O	O59	1.0	0.62621	0.66625	0.93767	1.0000
O	O60	1.0	0.65004	0.82410	0.00583	1.0000
O	O61	1.0	0.76900	0.82324	0.92260	1.0000
O	O62	1.0	0.55843	0.86038	0.91959	1.0000
O	O63	1.0	0.65403	0.50161	0.99968	1.0000
O	O64	1.0	0.77856	0.52889	0.91814	1.0000
O	O65	1.0	0.57712	0.46779	0.90901	1.0000
O	O66	1.0	0.28935	0.64831	0.94229	1.0000
O	O67	1.0	0.16677	0.81491	0.92234	1.0000
O	O68	1.0	0.36290	0.80639	0.88778	1.0000
O	O69	1.0	0.16420	0.47989	0.93298	1.0000
O	O70	1.0	0.36527	0.46332	0.91123	1.0000

O	O71	1.0	0.03421	0.64967	0.93535	1.0000
O	O72	1.0	0.96918	0.82835	0.89237	1.0000
O	O73	1.0	0.97313	0.46332	0.90008	1.0000
O	O74	1.0	0.38258	0.32793	0.44045	1.0000
O	O75	1.0	0.34305	0.16916	0.50685	1.0000
O	O76	1.0	0.22863	0.18381	0.42346	1.0000
O	O77	1.0	0.43701	0.13072	0.42017	1.0000
O	O78	1.0	0.35245	0.49185	0.50276	1.0000
O	O79	1.0	0.22380	0.46015	0.42415	1.0000
O	O80	1.0	0.42389	0.52767	0.41101	1.0000
O	O81	1.0	0.71199	0.35542	0.44319	1.0000
O	O82	1.0	0.83187	0.18903	0.42281	1.0000
O	O83	1.0	0.63228	0.19494	0.39232	1.0000
O	O84	1.0	0.83597	0.52715	0.43494	1.0000
O	O85	1.0	0.63701	0.53773	0.40852	1.0000
O	O86	1.0	0.96145	0.35633	0.43863	1.0000
O	O87	1.0	0.02965	0.18326	0.39348	1.0000
O	O88	1.0	0.03336	0.54176	0.40530	1.0000
O	O89	1.0	0.66893	0.36354	0.69741	1.0000
O	O90	1.0	0.83097	0.31950	0.75920	1.0000
O	O91	1.0	0.84031	0.26044	0.66195	1.0000
O	O92	1.0	0.48909	0.30960	0.74611	1.0000
O	O93	1.0	0.52650	0.23809	0.65340	1.0000
O	O94	1.0	0.48412	0.44386	0.67147	1.0000
O	O95	1.0	0.66082	0.71708	0.68862	1.0000
O	O96	1.0	0.83081	0.84839	0.69426	1.0000
O	O97	1.0	0.84246	0.66582	0.64378	1.0000
O	O98	1.0	0.48934	0.83284	0.69922	1.0000
O	O99	1.0	0.47562	0.65018	0.64999	1.0000
O	O100	1.0	0.65880	0.96665	0.69570	1.0000
O	O101	1.0	0.83749	0.04703	0.65626	1.0000
O	O102	1.0	0.48063	0.01142	0.64784	1.0000
O	O103	1.0	0.33131	0.62840	0.20165	1.0000
O	O104	1.0	0.17176	0.66672	0.26479	1.0000

O	O105	1.0	0.16387	0.74766	0.17119	1.0000
O	O106	1.0	0.51193	0.68499	0.24617	1.0000
O	O107	1.0	0.46533	0.76448	0.15538	1.0000
O	O108	1.0	0.51710	0.55942	0.16861	1.0000
O	O109	1.0	0.33580	0.28675	0.19255	1.0000
O	O110	1.0	0.16515	0.15922	0.19773	1.0000
O	O111	1.0	0.15733	0.34090	0.14554	1.0000
O	O112	1.0	0.50622	0.16805	0.19644	1.0000
O	O113	1.0	0.51832	0.35247	0.14979	1.0000
O	O114	1.0	0.33697	0.03526	0.19210	1.0000
O	O115	1.0	0.51736	0.98776	0.14656	1.0000
O	O116	1.0	0.01277	0.82427	0.99116	1.0000
O	O117	1.0	0.00889	0.48697	0.99964	1.0000
O	O118	1.0	0.98234	0.17935	0.49265	1.0000
O	O119	1.0	0.98761	0.51675	0.50346	1.0000
O	O120	1.0	0.17378	0.97905	0.25291	1.0000
O	O121	1.0	0.50785	0.98963	0.24735	1.0000
O	O122	1.0	0.82361	0.01551	0.75492	1.0000
O	O123	1.0	0.48827	0.01466	0.74850	1.0000
O	O124	1.0	0.85717	0.46365	0.68923	1.0000
O	O125	1.0	0.46935	0.85955	0.05863	1.0000
O	O126	1.0	0.17662	0.82380	0.33280	1.0000
O	O127	1.0	0.13822	0.53854	0.19045	1.0000
O	O128	1.0	0.15031	0.97402	0.15283	1.0000
Al	Al1	1.0	0.45982	0.13521	0.62381	1.0000
Al	Al2	1.0	0.86472	0.53627	0.62634	1.0000
Al	Al3	1.0	0.53439	0.86300	0.12259	1.0000
Al	Al4	1.0	0.22040	0.96308	0.31385	1.0000
Al	Al5	1.0	0.13658	0.47085	0.12646	1.0000
Al	Al6	1.0	0.15536	0.83805	0.12204	1.0000
Si	Si1	1.0	0.33813	0.54659	0.05960	1.0000
Si	Si2	1.0	0.72109	0.78946	0.05689	1.0000
Si	Si3	1.0	0.71246	0.53226	0.05295	1.0000
Si	Si4	1.0	0.96449	0.78940	0.04656	1.0000

Si	Si5	1.0	0.95518	0.53079	0.05187	1.0000
Si	Si6	1.0	0.65052	0.20667	0.54814	1.0000
Si	Si7	1.0	0.66214	0.45915	0.56015	1.0000
Si	Si8	1.0	0.27294	0.20479	0.55807	1.0000
Si	Si9	1.0	0.28826	0.46221	0.55504	1.0000
Si	Si10	1.0	0.02913	0.21314	0.54790	1.0000
Si	Si11	1.0	0.04482	0.47090	0.55448	1.0000
Si	Si12	1.0	0.20630	0.34621	0.30457	1.0000
Si	Si13	1.0	0.45665	0.34566	0.30748	1.0000
Si	Si14	1.0	0.48291	0.72275	0.30267	1.0000
Si	Si15	1.0	0.48104	0.95887	0.30567	1.0000
Si	Si16	1.0	0.14849	0.51428	0.38183	1.0000
Si	Si17	1.0	0.79238	0.65081	0.80242	1.0000
Si	Si18	1.0	0.54238	0.65369	0.80679	1.0000
Si	Si19	1.0	0.77741	0.28366	0.81348	1.0000
Si	Si20	1.0	0.52229	0.28209	0.80361	1.0000
Si	Si21	1.0	0.77964	0.04114	0.81150	1.0000
Si	Si22	1.0	0.52333	0.04188	0.80584	1.0000
Si	Si23	1.0	0.85680	0.47727	0.87589	1.0000
Si	Si24	1.0	0.65264	0.79271	0.94571	1.0000
Si	Si25	1.0	0.65910	0.54092	0.94139	1.0000
Si	Si26	1.0	0.28620	0.77559	0.93490	1.0000
Si	Si27	1.0	0.28255	0.52020	0.94852	1.0000
Si	Si28	1.0	0.04480	0.77876	0.93602	1.0000
Si	Si29	1.0	0.04465	0.52161	0.94308	1.0000
Si	Si30	1.0	0.47912	0.85063	0.87089	1.0000
Si	Si31	1.0	0.34610	0.20272	0.44688	1.0000
Si	Si32	1.0	0.34604	0.45191	0.44482	1.0000
Si	Si33	1.0	0.71298	0.22795	0.43687	1.0000
Si	Si34	1.0	0.71642	0.48382	0.44828	1.0000
Si	Si35	1.0	0.95249	0.22728	0.43739	1.0000
Si	Si36	1.0	0.95442	0.48409	0.44662	1.0000
Si	Si37	1.0	0.51972	0.14707	0.37237	1.0000
Si	Si38	1.0	0.54081	0.33629	0.69103	1.0000

Si	Si39	1.0	0.78996	0.72454	0.69075	1.0000
Si	Si40	1.0	0.53254	0.71287	0.69626	1.0000
Si	Si41	1.0	0.78681	0.96904	0.70006	1.0000
Si	Si42	1.0	0.52892	0.95689	0.69683	1.0000
Si	Si43	1.0	0.45710	0.66229	0.19125	1.0000
Si	Si44	1.0	0.20713	0.28327	0.19327	1.0000
Si	Si45	1.0	0.46476	0.28854	0.19656	1.0000
Si	Si46	1.0	0.46819	0.04363	0.19486	1.0000
Si	Si47	1.0	0.52990	0.47033	0.12481	1.0000
Si	Si48	1.0	0.84150	0.15727	0.62420	1.0000
Si	Si49	1.0	0.46853	0.53080	0.62677	1.0000
Si	Si50	1.0	0.14974	0.15411	0.37630	1.0000
Si	Si51	1.0	0.52997	0.53273	0.37541	1.0000
Si	Si52	1.0	0.84767	0.84542	0.87440	1.0000
Si	Si53	1.0	0.46884	0.46713	0.87548	1.0000
Si	Si54	1.0	0.79480	0.34510	0.70189	1.0000
Si	Si55	1.0	0.35155	0.79741	0.04503	1.0000
Si	Si56	1.0	0.22880	0.70393	0.31644	1.0000
Si	Si57	1.0	0.20573	0.65335	0.20500	1.0000
Si	Si58	1.0	0.21126	0.03931	0.20261	1.0000

AlSiAl-T7T7T7T7T9T9

data_image0

_chemical_formula_structural H6O128Al6Si58

_chemical_formula_sum "H6 O128 Al6 Si58"

_cell_length_a 12.569

_cell_length_b 12.5488

_cell_length_c 26.4741

_cell_angle_alpha 89.9988

_cell_angle_beta 89.8953

_cell_angle_gamma 90.8891

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47576	0.14444	0.53178	1.0000
H	H2	1.0	0.86236	0.51375	0.71725	1.0000
H	H3	1.0	0.52521	0.85463	0.03149	1.0000
H	H4	1.0	0.13542	0.48701	0.21803	1.0000
H	H5	1.0	0.08478	0.01173	0.14257	1.0000
H	H6	1.0	0.91555	0.98865	0.64297	1.0000
O	O1	1.0	0.36891	0.67241	0.04900	1.0000
O	O2	1.0	0.32631	0.83251	0.98677	1.0000

O	O3	1.0	0.26767	0.84683	0.08461	1.0000
O	O4	1.0	0.30977	0.48897	0.00627	1.0000
O	O5	1.0	0.23708	0.54027	0.09725	1.0000
O	O6	1.0	0.44154	0.48851	0.08148	1.0000
O	O7	1.0	0.71629	0.66179	0.05937	1.0000
O	O8	1.0	0.84324	0.83372	0.04950	1.0000
O	O9	1.0	0.66510	0.84213	0.10468	1.0000
O	O10	1.0	0.83184	0.48892	0.05215	1.0000
O	O11	1.0	0.64832	0.47963	0.10066	1.0000
O	O12	1.0	0.96130	0.66120	0.05190	1.0000
O	O13	1.0	0.03695	0.84439	0.09016	1.0000
O	O14	1.0	0.01220	0.48612	0.10196	1.0000
O	O15	1.0	0.63115	0.32778	0.54976	1.0000
O	O16	1.0	0.67364	0.16864	0.48684	1.0000
O	O17	1.0	0.73312	0.15295	0.58437	1.0000
O	O18	1.0	0.53167	0.14070	0.55854	1.0000
O	O19	1.0	0.68540	0.51095	0.50528	1.0000
O	O20	1.0	0.76636	0.46074	0.59490	1.0000
O	O21	1.0	0.56097	0.51238	0.58329	1.0000
O	O22	1.0	0.28530	0.33629	0.56011	1.0000
O	O23	1.0	0.15780	0.16509	0.54936	1.0000
O	O24	1.0	0.33500	0.15493	0.60471	1.0000
O	O25	1.0	0.17039	0.50944	0.55189	1.0000
O	O26	1.0	0.35296	0.51917	0.60079	1.0000
O	O27	1.0	0.04002	0.33797	0.55202	1.0000
O	O28	1.0	0.96405	0.15483	0.59035	1.0000
O	O29	1.0	0.99071	0.51313	0.60277	1.0000
O	O30	1.0	0.33544	0.38587	0.30899	1.0000
O	O31	1.0	0.17181	0.35330	0.24504	1.0000
O	O32	1.0	0.18750	0.23712	0.32821	1.0000
O	O33	1.0	0.14028	0.44630	0.33142	1.0000
O	O34	1.0	0.50000	0.34863	0.24811	1.0000
O	O35	1.0	0.46836	0.23038	0.33028	1.0000
O	O36	1.0	0.53399	0.43181	0.33777	1.0000

O	O37	1.0	0.35207	0.71357	0.30994	1.0000
O	O38	1.0	0.18445	0.83642	0.32648	1.0000
O	O39	1.0	0.19131	0.64232	0.36376	1.0000
O	O40	1.0	0.51844	0.84100	0.31629	1.0000
O	O41	1.0	0.53722	0.64357	0.34301	1.0000
O	O42	1.0	0.34862	0.97163	0.31464	1.0000
O	O43	1.0	0.16509	0.03595	0.35328	1.0000
O	O44	1.0	0.53908	0.03629	0.34388	1.0000
O	O45	1.0	0.66696	0.61510	0.80998	1.0000
O	O46	1.0	0.82798	0.64638	0.74423	1.0000
O	O47	1.0	0.81638	0.76366	0.82723	1.0000
O	O48	1.0	0.86259	0.55423	0.83060	1.0000
O	O49	1.0	0.50266	0.65027	0.74898	1.0000
O	O50	1.0	0.53373	0.77111	0.83019	1.0000
O	O51	1.0	0.46839	0.56977	0.83928	1.0000
O	O52	1.0	0.64782	0.28662	0.81031	1.0000
O	O53	1.0	0.81586	0.16408	0.82618	1.0000
O	O54	1.0	0.80943	0.35857	0.86314	1.0000
O	O55	1.0	0.48130	0.15947	0.81722	1.0000
O	O56	1.0	0.46248	0.35783	0.84299	1.0000
O	O57	1.0	0.65149	0.02944	0.81444	1.0000
O	O58	1.0	0.46187	0.96443	0.84503	1.0000
O	O59	1.0	0.62286	0.66597	0.93834	1.0000
O	O60	1.0	0.65107	0.82480	0.00568	1.0000
O	O61	1.0	0.76666	0.82044	0.92151	1.0000
O	O62	1.0	0.55687	0.86093	0.92010	1.0000
O	O63	1.0	0.65045	0.50245	0.00130	1.0000
O	O64	1.0	0.77799	0.52997	0.92178	1.0000
O	O65	1.0	0.57713	0.46734	0.90963	1.0000
O	O66	1.0	0.28963	0.64811	0.94191	1.0000
O	O67	1.0	0.16500	0.81231	0.92160	1.0000
O	O68	1.0	0.36153	0.80779	0.88797	1.0000
O	O69	1.0	0.16416	0.47932	0.93316	1.0000
O	O70	1.0	0.36507	0.46303	0.91121	1.0000

O	O71	1.0	0.03231	0.64703	0.93462	1.0000
O	O72	1.0	0.96735	0.82600	0.89231	1.0000
O	O73	1.0	0.97056	0.45727	0.90321	1.0000
O	O74	1.0	0.37724	0.33224	0.43789	1.0000
O	O75	1.0	0.35074	0.17395	0.50576	1.0000
O	O76	1.0	0.23435	0.17642	0.42211	1.0000
O	O77	1.0	0.44438	0.13784	0.41964	1.0000
O	O78	1.0	0.35292	0.49482	0.50169	1.0000
O	O79	1.0	0.22461	0.47148	0.42248	1.0000
O	O80	1.0	0.42649	0.53053	0.40999	1.0000
O	O81	1.0	0.71110	0.35218	0.44114	1.0000
O	O82	1.0	0.83604	0.18723	0.42205	1.0000
O	O83	1.0	0.64008	0.19118	0.38786	1.0000
O	O84	1.0	0.83707	0.52143	0.43461	1.0000
O	O85	1.0	0.63863	0.53754	0.40928	1.0000
O	O86	1.0	0.96738	0.35302	0.43598	1.0000
O	O87	1.0	0.03398	0.17591	0.39248	1.0000
O	O88	1.0	0.03103	0.54196	0.40401	1.0000
O	O89	1.0	0.66790	0.36954	0.70050	1.0000
O	O90	1.0	0.82809	0.33039	0.76381	1.0000
O	O91	1.0	0.83478	0.25190	0.66990	1.0000
O	O92	1.0	0.48817	0.31105	0.74651	1.0000
O	O93	1.0	0.53137	0.23688	0.65456	1.0000
O	O94	1.0	0.48198	0.44167	0.67079	1.0000
O	O95	1.0	0.66400	0.71308	0.69135	1.0000
O	O96	1.0	0.83507	0.83832	0.69915	1.0000
O	O97	1.0	0.84380	0.65947	0.64493	1.0000
O	O98	1.0	0.49509	0.83179	0.69745	1.0000
O	O99	1.0	0.48116	0.64797	0.64952	1.0000
O	O100	1.0	0.66445	0.96504	0.69177	1.0000
O	O101	1.0	0.48435	0.01178	0.64657	1.0000
O	O102	1.0	0.33136	0.62998	0.20104	1.0000
O	O103	1.0	0.17109	0.66987	0.26438	1.0000
O	O104	1.0	0.16506	0.74840	0.17036	1.0000

O	O105	1.0	0.51188	0.68751	0.24620	1.0000
O	O106	1.0	0.46744	0.76267	0.15451	1.0000
O	O107	1.0	0.51687	0.55779	0.16994	1.0000
O	O108	1.0	0.33607	0.28624	0.19246	1.0000
O	O109	1.0	0.16451	0.16158	0.19944	1.0000
O	O110	1.0	0.15702	0.34089	0.14571	1.0000
O	O111	1.0	0.50533	0.16772	0.19614	1.0000
O	O112	1.0	0.51686	0.35174	0.14834	1.0000
O	O113	1.0	0.33533	0.03526	0.19079	1.0000
O	O114	1.0	0.51596	0.98712	0.14595	1.0000
O	O115	1.0	0.01277	0.82176	0.99099	1.0000
O	O116	1.0	0.01188	0.48806	0.00138	1.0000
O	O117	1.0	0.98834	0.17725	0.49121	1.0000
O	O118	1.0	0.98958	0.51225	0.50229	1.0000
O	O119	1.0	0.17854	0.98515	0.25551	1.0000
O	O120	1.0	0.50281	0.98801	0.24651	1.0000
O	O121	1.0	0.82228	0.01416	0.75577	1.0000
O	O122	1.0	0.49616	0.01219	0.74724	1.0000
O	O123	1.0	0.85968	0.46021	0.68962	1.0000
O	O124	1.0	0.46905	0.85876	0.05820	1.0000
O	O125	1.0	0.13880	0.54027	0.19032	1.0000
O	O126	1.0	0.83385	0.96450	0.85377	1.0000
O	O127	1.0	0.14615	0.97404	0.15594	1.0000
O	O128	1.0	0.85356	0.02599	0.65606	1.0000
Al	Al1	1.0	0.46538	0.13652	0.62246	1.0000
Al	Al2	1.0	0.86566	0.52916	0.62634	1.0000
Al	Al3	1.0	0.53463	0.86208	0.12216	1.0000
Al	Al4	1.0	0.13572	0.47117	0.12706	1.0000
Al	Al5	1.0	0.15573	0.83949	0.12212	1.0000
Al	Al6	1.0	0.84466	0.16026	0.62194	1.0000
Si	Si1	1.0	0.33698	0.54733	0.05982	1.0000
Si	Si2	1.0	0.72196	0.79079	0.05690	1.0000
Si	Si3	1.0	0.71217	0.53337	0.05380	1.0000
Si	Si4	1.0	0.96497	0.78996	0.04675	1.0000

Si	Si5	1.0	0.95510	0.53152	0.05294	1.0000
Si	Si6	1.0	0.65066	0.20098	0.54540	1.0000
Si	Si7	1.0	0.66341	0.45322	0.55954	1.0000
Si	Si8	1.0	0.27916	0.20732	0.55702	1.0000
Si	Si9	1.0	0.28987	0.46465	0.55405	1.0000
Si	Si10	1.0	0.03622	0.20918	0.54686	1.0000
Si	Si11	1.0	0.04691	0.46766	0.55340	1.0000
Si	Si12	1.0	0.20956	0.35444	0.30443	1.0000
Si	Si13	1.0	0.45985	0.34922	0.30630	1.0000
Si	Si14	1.0	0.22483	0.71581	0.31618	1.0000
Si	Si15	1.0	0.48001	0.72044	0.30320	1.0000
Si	Si16	1.0	0.22033	0.95758	0.31278	1.0000
Si	Si17	1.0	0.47618	0.95939	0.30469	1.0000
Si	Si18	1.0	0.14787	0.52560	0.38048	1.0000
Si	Si19	1.0	0.79272	0.64612	0.80404	1.0000
Si	Si20	1.0	0.54246	0.65146	0.80714	1.0000
Si	Si21	1.0	0.77517	0.28461	0.81590	1.0000
Si	Si22	1.0	0.51989	0.27978	0.80364	1.0000
Si	Si23	1.0	0.52371	0.04120	0.80529	1.0000
Si	Si24	1.0	0.85412	0.47489	0.87966	1.0000
Si	Si25	1.0	0.65109	0.79221	0.94575	1.0000
Si	Si26	1.0	0.65697	0.54097	0.94302	1.0000
Si	Si27	1.0	0.28488	0.77536	0.93476	1.0000
Si	Si28	1.0	0.28249	0.52005	0.94852	1.0000
Si	Si29	1.0	0.04359	0.77610	0.93570	1.0000
Si	Si30	1.0	0.04450	0.51956	0.94417	1.0000
Si	Si31	1.0	0.47823	0.84978	0.87112	1.0000
Si	Si32	1.0	0.35002	0.20589	0.44573	1.0000
Si	Si33	1.0	0.34553	0.45774	0.44323	1.0000
Si	Si34	1.0	0.71591	0.22473	0.43467	1.0000
Si	Si35	1.0	0.71776	0.48023	0.44804	1.0000
Si	Si36	1.0	0.95716	0.22395	0.43623	1.0000
Si	Si37	1.0	0.95652	0.48066	0.44521	1.0000
Si	Si38	1.0	0.52329	0.15034	0.37067	1.0000

Si	Si39	1.0	0.54203	0.33684	0.69166	1.0000
Si	Si40	1.0	0.79243	0.71429	0.69304	1.0000
Si	Si41	1.0	0.53524	0.71035	0.69640	1.0000
Si	Si42	1.0	0.53312	0.95587	0.69476	1.0000
Si	Si43	1.0	0.45719	0.66240	0.19151	1.0000
Si	Si44	1.0	0.20764	0.28564	0.19378	1.0000
Si	Si45	1.0	0.46502	0.28912	0.19579	1.0000
Si	Si46	1.0	0.46669	0.04380	0.19388	1.0000
Si	Si47	1.0	0.52993	0.47114	0.12501	1.0000
Si	Si48	1.0	0.47027	0.52860	0.62595	1.0000
Si	Si49	1.0	0.15499	0.15678	0.37436	1.0000
Si	Si50	1.0	0.53324	0.53487	0.37514	1.0000
Si	Si51	1.0	0.46899	0.46545	0.87590	1.0000
Si	Si52	1.0	0.79343	0.34489	0.70498	1.0000
Si	Si53	1.0	0.34970	0.79931	0.04516	1.0000
Si	Si54	1.0	0.20589	0.65530	0.20548	1.0000
Si	Si55	1.0	0.77982	0.04276	0.81289	1.0000
Si	Si56	1.0	0.84625	0.84325	0.87404	1.0000
Si	Si57	1.0	0.21145	0.04260	0.20310	1.0000
Si	Si58	1.0	0.78850	0.95736	0.70338	1.0000

T2T2T7T7T7T7T9

data_image0

_chemical_formula_structural H7O128Al7Si57

_chemical_formula_sum "H7 O128 Al7 Si57"

_cell_length_a 12.5701

_cell_length_b 12.5312

_cell_length_c 26.5614

_cell_angle_alpha 89.6955

_cell_angle_beta 89.8055

_cell_angle_gamma 90.2428

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.48039	0.13993	0.53505	1.0000
H	H2	1.0	0.85749	0.51648	0.71433	1.0000
H	H3	1.0	0.58414	0.83759	0.34331	1.0000
H	H4	1.0	0.08561	0.01628	0.13576	1.0000
H	H5	1.0	0.47746	0.84831	0.95794	1.0000
H	H6	1.0	0.16538	0.41492	0.90954	1.0000
H	H7	1.0	0.15168	0.52795	0.29195	1.0000
O	O1	1.0	0.37082	0.66469	0.05386	1.0000

O	O2	1.0	0.34299	0.82118	0.98535	1.0000
O	O3	1.0	0.24249	0.82896	0.07531	1.0000
O	O4	1.0	0.45287	0.85660	0.06483	1.0000
O	O5	1.0	0.32116	0.48378	0.00706	1.0000
O	O6	1.0	0.21476	0.54106	0.08913	1.0000
O	O7	1.0	0.41445	0.47415	0.09460	1.0000
O	O8	1.0	0.70480	0.65254	0.05846	1.0000
O	O9	1.0	0.83230	0.82406	0.06531	1.0000
O	O10	1.0	0.64227	0.82665	0.10480	1.0000
O	O11	1.0	0.83121	0.48487	0.06942	1.0000
O	O12	1.0	0.62688	0.46819	0.08870	1.0000
O	O13	1.0	0.95816	0.65513	0.06082	1.0000
O	O14	1.0	0.02401	0.83593	0.10293	1.0000
O	O15	1.0	0.01674	0.48265	0.11129	1.0000
O	O16	1.0	0.62693	0.33520	0.55316	1.0000
O	O17	1.0	0.67471	0.17490	0.49120	1.0000
O	O18	1.0	0.73695	0.16390	0.58685	1.0000
O	O19	1.0	0.53333	0.14489	0.56265	1.0000
O	O20	1.0	0.66977	0.51577	0.50267	1.0000
O	O21	1.0	0.76898	0.46976	0.58936	1.0000
O	O22	1.0	0.56203	0.52321	0.58519	1.0000
O	O23	1.0	0.28253	0.33363	0.56128	1.0000
O	O24	1.0	0.14949	0.16592	0.55611	1.0000
O	O25	1.0	0.33065	0.15444	0.60817	1.0000
O	O26	1.0	0.17060	0.50968	0.55175	1.0000
O	O27	1.0	0.35251	0.51941	0.59967	1.0000
O	O28	1.0	0.03614	0.34250	0.55424	1.0000
O	O29	1.0	0.95062	0.16342	0.59193	1.0000
O	O30	1.0	0.99134	0.51928	0.60265	1.0000
O	O31	1.0	0.34115	0.38090	0.30480	1.0000
O	O32	1.0	0.17469	0.33805	0.24476	1.0000
O	O33	1.0	0.17709	0.26268	0.33839	1.0000
O	O34	1.0	0.51040	0.31349	0.25366	1.0000
O	O35	1.0	0.45951	0.22451	0.34076	1.0000

O	O36	1.0	0.53725	0.42533	0.33562	1.0000
O	O37	1.0	0.35276	0.74400	0.30153	1.0000
O	O38	1.0	0.17350	0.84990	0.31292	1.0000
O	O39	1.0	0.20308	0.66538	0.36334	1.0000
O	O40	1.0	0.51769	0.63542	0.34259	1.0000
O	O41	1.0	0.34105	0.98201	0.31021	1.0000
O	O42	1.0	0.15524	0.05097	0.34455	1.0000
O	O43	1.0	0.54580	0.03172	0.34862	1.0000
O	O44	1.0	0.68098	0.61583	0.80880	1.0000
O	O45	1.0	0.83194	0.65740	0.74011	1.0000
O	O46	1.0	0.83801	0.75528	0.82942	1.0000
O	O47	1.0	0.87695	0.54633	0.82029	1.0000
O	O48	1.0	0.51390	0.64560	0.74890	1.0000
O	O49	1.0	0.54306	0.76713	0.83141	1.0000
O	O50	1.0	0.48432	0.56521	0.83775	1.0000
O	O51	1.0	0.64982	0.30659	0.81014	1.0000
O	O52	1.0	0.80232	0.15979	0.82438	1.0000
O	O53	1.0	0.82560	0.35364	0.85654	1.0000
O	O54	1.0	0.49402	0.16331	0.81677	1.0000
O	O55	1.0	0.46044	0.35523	0.84637	1.0000
O	O56	1.0	0.64787	0.01594	0.81252	1.0000
O	O57	1.0	0.83756	0.96194	0.84861	1.0000
O	O58	1.0	0.45262	0.97136	0.84566	1.0000
O	O59	1.0	0.62914	0.65846	0.94196	1.0000
O	O60	1.0	0.66443	0.82323	0.00461	1.0000
O	O61	1.0	0.74029	0.82932	0.91084	1.0000
O	O62	1.0	0.68873	0.48916	0.99545	1.0000
O	O63	1.0	0.78152	0.53130	0.90846	1.0000
O	O64	1.0	0.57825	0.46217	0.91330	1.0000
O	O65	1.0	0.26168	0.64576	0.94965	1.0000
O	O66	1.0	0.15330	0.82463	0.93685	1.0000
O	O67	1.0	0.33741	0.79398	0.88691	1.0000
O	O68	1.0	0.36726	0.47787	0.90924	1.0000
O	O69	1.0	0.02552	0.65577	0.94408	1.0000

O	O70	1.0	0.95248	0.83673	0.90545	1.0000
O	O71	1.0	0.97840	0.45680	0.89935	1.0000
O	O72	1.0	0.37774	0.31826	0.44217	1.0000
O	O73	1.0	0.33992	0.16297	0.50941	1.0000
O	O74	1.0	0.23720	0.16203	0.42155	1.0000
O	O75	1.0	0.44704	0.12304	0.42747	1.0000
O	O76	1.0	0.35227	0.48747	0.50159	1.0000
O	O77	1.0	0.23072	0.45980	0.41869	1.0000
O	O78	1.0	0.43407	0.51276	0.41281	1.0000
O	O79	1.0	0.70847	0.35621	0.44203	1.0000
O	O80	1.0	0.83452	0.19000	0.42523	1.0000
O	O81	1.0	0.63696	0.19149	0.39319	1.0000
O	O82	1.0	0.83404	0.52644	0.43831	1.0000
O	O83	1.0	0.64323	0.54018	0.40382	1.0000
O	O84	1.0	0.96398	0.35685	0.43746	1.0000
O	O85	1.0	0.03245	0.17515	0.39742	1.0000
O	O86	1.0	0.02449	0.54669	0.40235	1.0000
O	O87	1.0	0.66604	0.36651	0.69684	1.0000
O	O88	1.0	0.82815	0.31773	0.75772	1.0000
O	O89	1.0	0.83702	0.26003	0.66151	1.0000
O	O90	1.0	0.48782	0.32052	0.74829	1.0000
O	O91	1.0	0.52641	0.23250	0.65854	1.0000
O	O92	1.0	0.47894	0.44057	0.66915	1.0000
O	O93	1.0	0.66335	0.71698	0.68703	1.0000
O	O94	1.0	0.83226	0.84813	0.69276	1.0000
O	O95	1.0	0.84224	0.66597	0.64140	1.0000
O	O96	1.0	0.49042	0.83098	0.70142	1.0000
O	O97	1.0	0.47439	0.64989	0.65178	1.0000
O	O98	1.0	0.65767	0.96436	0.69325	1.0000
O	O99	1.0	0.83645	0.04590	0.65449	1.0000
O	O100	1.0	0.47857	0.00715	0.64707	1.0000
O	O101	1.0	0.33918	0.62841	0.19755	1.0000
O	O102	1.0	0.18076	0.65889	0.26470	1.0000
O	O103	1.0	0.18694	0.77067	0.17790	1.0000

O	O104	1.0	0.14330	0.55862	0.18264	1.0000
O	O105	1.0	0.51639	0.68592	0.24486	1.0000
O	O106	1.0	0.46564	0.77891	0.15807	1.0000
O	O107	1.0	0.53102	0.57690	0.16174	1.0000
O	O108	1.0	0.34628	0.29647	0.19173	1.0000
O	O109	1.0	0.17670	0.17172	0.18269	1.0000
O	O110	1.0	0.17371	0.36562	0.14496	1.0000
O	O111	1.0	0.50722	0.16309	0.18304	1.0000
O	O112	1.0	0.53295	0.36398	0.15844	1.0000
O	O113	1.0	0.33966	0.03106	0.18256	1.0000
O	O114	1.0	0.52022	0.97952	0.13896	1.0000
O	O115	1.0	0.99589	0.82578	0.00293	1.0000
O	O116	1.0	0.00428	0.47693	0.01085	1.0000
O	O117	1.0	0.98452	0.18151	0.49466	1.0000
O	O118	1.0	0.99194	0.51646	0.50182	1.0000
O	O119	1.0	0.17644	0.00956	0.24785	1.0000
O	O120	1.0	0.50997	0.98652	0.23929	1.0000
O	O121	1.0	0.81931	0.01713	0.75227	1.0000
O	O122	1.0	0.48818	0.01610	0.74726	1.0000
O	O123	1.0	0.85378	0.46316	0.68681	1.0000
O	O124	1.0	0.53259	0.83506	0.31599	1.0000
O	O125	1.0	0.14968	0.98123	0.14827	1.0000
O	O126	1.0	0.53163	0.84450	0.93046	1.0000
O	O127	1.0	0.16893	0.46353	0.93810	1.0000
O	O128	1.0	0.15361	0.47183	0.31891	1.0000
Al	Al1	1.0	0.46050	0.13433	0.62588	1.0000
Al	Al2	1.0	0.86435	0.53627	0.62368	1.0000
Al	Al3	1.0	0.47571	0.97072	0.30144	1.0000
Al	Al4	1.0	0.15280	0.83917	0.12390	1.0000
Al	Al5	1.0	0.45907	0.84352	0.86726	1.0000
Al	Al6	1.0	0.03157	0.52040	0.95068	1.0000
Al	Al7	1.0	0.15325	0.54296	0.38272	1.0000
Si	Si1	1.0	0.34701	0.79292	0.04607	1.0000
Si	Si2	1.0	0.33046	0.54245	0.06170	1.0000

Si	Si3	1.0	0.71252	0.78114	0.05839	1.0000
Si	Si4	1.0	0.71440	0.52442	0.05285	1.0000
Si	Si5	1.0	0.95529	0.78479	0.05814	1.0000
Si	Si6	1.0	0.95380	0.52538	0.06132	1.0000
Si	Si7	1.0	0.52054	0.85965	0.11685	1.0000
Si	Si8	1.0	0.64901	0.20937	0.54866	1.0000
Si	Si9	1.0	0.66005	0.46223	0.55871	1.0000
Si	Si10	1.0	0.27304	0.20447	0.56041	1.0000
Si	Si11	1.0	0.28934	0.46215	0.55421	1.0000
Si	Si12	1.0	0.03043	0.21470	0.54975	1.0000
Si	Si13	1.0	0.04648	0.47253	0.55345	1.0000
Si	Si14	1.0	0.46312	0.33538	0.30946	1.0000
Si	Si15	1.0	0.22487	0.73106	0.31297	1.0000
Si	Si16	1.0	0.21491	0.97284	0.30485	1.0000
Si	Si17	1.0	0.80573	0.64648	0.80038	1.0000
Si	Si18	1.0	0.55579	0.65179	0.80652	1.0000
Si	Si19	1.0	0.77579	0.28303	0.81206	1.0000
Si	Si20	1.0	0.52313	0.28518	0.80446	1.0000
Si	Si21	1.0	0.77467	0.03754	0.80895	1.0000
Si	Si22	1.0	0.52002	0.03896	0.80549	1.0000
Si	Si23	1.0	0.86732	0.47173	0.87118	1.0000
Si	Si24	1.0	0.67027	0.53455	0.93902	1.0000
Si	Si25	1.0	0.27171	0.77406	0.93738	1.0000
Si	Si26	1.0	0.03093	0.78296	0.94728	1.0000
Si	Si27	1.0	0.34795	0.19274	0.44947	1.0000
Si	Si28	1.0	0.34519	0.44465	0.44417	1.0000
Si	Si29	1.0	0.71463	0.22840	0.43796	1.0000
Si	Si30	1.0	0.71467	0.48466	0.44756	1.0000
Si	Si31	1.0	0.95486	0.22822	0.43935	1.0000
Si	Si32	1.0	0.95633	0.48664	0.44494	1.0000
Si	Si33	1.0	0.52325	0.14074	0.37777	1.0000
Si	Si34	1.0	0.53839	0.33714	0.69217	1.0000
Si	Si35	1.0	0.79222	0.72454	0.68888	1.0000
Si	Si36	1.0	0.53592	0.71128	0.69679	1.0000

Si	Si37	1.0	0.78520	0.96844	0.69787	1.0000
Si	Si38	1.0	0.52811	0.95511	0.69656	1.0000
Si	Si39	1.0	0.21255	0.65875	0.20412	1.0000
Si	Si40	1.0	0.46183	0.66793	0.18962	1.0000
Si	Si41	1.0	0.21834	0.29413	0.19079	1.0000
Si	Si42	1.0	0.47423	0.28357	0.19685	1.0000
Si	Si43	1.0	0.47063	0.03893	0.18772	1.0000
Si	Si44	1.0	0.13699	0.48719	0.13167	1.0000
Si	Si45	1.0	0.52587	0.47224	0.12563	1.0000
Si	Si46	1.0	0.84077	0.15761	0.62373	1.0000
Si	Si47	1.0	0.46746	0.53253	0.62645	1.0000
Si	Si48	1.0	0.15158	0.16150	0.37594	1.0000
Si	Si49	1.0	0.53243	0.52519	0.37464	1.0000
Si	Si50	1.0	0.84353	0.84437	0.87357	1.0000
Si	Si51	1.0	0.47578	0.46589	0.87598	1.0000
Si	Si52	1.0	0.79175	0.34581	0.70084	1.0000
Si	Si53	1.0	0.47675	0.71616	0.30070	1.0000
Si	Si54	1.0	0.21610	0.05072	0.19361	1.0000
Si	Si55	1.0	0.64788	0.78593	0.94699	1.0000
Si	Si56	1.0	0.28790	0.52131	0.95105	1.0000
Si	Si57	1.0	0.21446	0.35736	0.30202	1.0000

AlSiAl-T1T7T7T7T7T9T9

data_image0
_chemical_formula_structural H7O128Al7Si57
_chemical_formula_sum "H7 O128 Al7 Si57"
_cell_length_a 12.5408
_cell_length_b 12.5313
_cell_length_c 26.4985
_cell_angle_alpha 90.1744
_cell_angle_beta 89.8445
_cell_angle_gamma 91.2274

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47553	0.14404	0.53115	1.0000
H	H2	1.0	0.86078	0.51595	0.71707	1.0000
H	H3	1.0	0.52661	0.85415	0.03167	1.0000
H	H4	1.0	0.13732	0.48542	0.21832	1.0000
H	H5	1.0	0.08270	0.00799	0.14388	1.0000
H	H6	1.0	0.90813	0.98499	0.63698	1.0000
H	H7	1.0	0.87482	0.17650	0.85904	1.0000
O	O1	1.0	0.36996	0.66936	0.04932	1.0000

O	O2	1.0	0.32891	0.82865	0.98700	1.0000
O	O3	1.0	0.26824	0.84401	0.08458	1.0000
O	O4	1.0	0.31078	0.48435	0.00619	1.0000
O	O5	1.0	0.23532	0.53782	0.09653	1.0000
O	O6	1.0	0.44009	0.48508	0.08208	1.0000
O	O7	1.0	0.71545	0.66314	0.05849	1.0000
O	O8	1.0	0.84495	0.83341	0.04837	1.0000
O	O9	1.0	0.66744	0.84403	0.10449	1.0000
O	O10	1.0	0.83074	0.48913	0.05176	1.0000
O	O11	1.0	0.64789	0.48061	0.10033	1.0000
O	O12	1.0	0.96256	0.66002	0.05109	1.0000
O	O13	1.0	0.03720	0.84326	0.09050	1.0000
O	O14	1.0	0.01001	0.48626	0.10308	1.0000
O	O15	1.0	0.62780	0.32974	0.54823	1.0000
O	O16	1.0	0.67275	0.17054	0.48560	1.0000
O	O17	1.0	0.73401	0.15852	0.58298	1.0000
O	O18	1.0	0.53195	0.13999	0.55773	1.0000
O	O19	1.0	0.68841	0.51381	0.50573	1.0000
O	O20	1.0	0.76655	0.45845	0.59507	1.0000
O	O21	1.0	0.56237	0.51465	0.58330	1.0000
O	O22	1.0	0.28552	0.33680	0.55926	1.0000
O	O23	1.0	0.15812	0.16517	0.54738	1.0000
O	O24	1.0	0.33488	0.15457	0.60347	1.0000
O	O25	1.0	0.17141	0.51102	0.55148	1.0000
O	O26	1.0	0.35357	0.51903	0.60075	1.0000
O	O27	1.0	0.04182	0.33887	0.55076	1.0000
O	O28	1.0	0.96488	0.15625	0.58926	1.0000
O	O29	1.0	0.99146	0.51215	0.60295	1.0000
O	O30	1.0	0.33598	0.38885	0.30907	1.0000
O	O31	1.0	0.17238	0.35392	0.24499	1.0000
O	O32	1.0	0.18879	0.23753	0.32763	1.0000
O	O33	1.0	0.13995	0.44656	0.33155	1.0000
O	O34	1.0	0.50010	0.35139	0.24797	1.0000
O	O35	1.0	0.46725	0.23190	0.32935	1.0000

O	O36	1.0	0.53538	0.43326	0.33812	1.0000
O	O37	1.0	0.35415	0.71605	0.30929	1.0000
O	O38	1.0	0.18570	0.83663	0.32709	1.0000
O	O39	1.0	0.19557	0.64229	0.36393	1.0000
O	O40	1.0	0.52155	0.84275	0.31620	1.0000
O	O41	1.0	0.53916	0.64521	0.34278	1.0000
O	O42	1.0	0.35038	0.97246	0.31482	1.0000
O	O43	1.0	0.16642	0.03671	0.35351	1.0000
O	O44	1.0	0.54186	0.03931	0.34243	1.0000
O	O45	1.0	0.66925	0.61396	0.80939	1.0000
O	O46	1.0	0.83021	0.64981	0.74394	1.0000
O	O47	1.0	0.81430	0.76968	0.82681	1.0000
O	O48	1.0	0.86652	0.56211	0.83132	1.0000
O	O49	1.0	0.50318	0.64939	0.74922	1.0000
O	O50	1.0	0.53854	0.77102	0.83018	1.0000
O	O51	1.0	0.46957	0.56981	0.83929	1.0000
O	O52	1.0	0.64551	0.27524	0.80941	1.0000
O	O53	1.0	0.80078	0.36992	0.86270	1.0000
O	O54	1.0	0.47044	0.15773	0.81661	1.0000
O	O55	1.0	0.46550	0.35772	0.84263	1.0000
O	O56	1.0	0.64343	0.03355	0.81627	1.0000
O	O57	1.0	0.45319	0.96026	0.84347	1.0000
O	O58	1.0	0.61525	0.66847	0.93963	1.0000
O	O59	1.0	0.65075	0.82787	0.00569	1.0000
O	O60	1.0	0.76939	0.81424	0.92292	1.0000
O	O61	1.0	0.56072	0.86605	0.91871	1.0000
O	O62	1.0	0.64936	0.50295	0.00103	1.0000
O	O63	1.0	0.77645	0.54034	0.92206	1.0000
O	O64	1.0	0.57768	0.46808	0.90958	1.0000
O	O65	1.0	0.28526	0.64330	0.94308	1.0000
O	O66	1.0	0.16836	0.81061	0.92145	1.0000
O	O67	1.0	0.36702	0.79825	0.88901	1.0000
O	O68	1.0	0.16336	0.47045	0.93368	1.0000
O	O69	1.0	0.36480	0.46106	0.91051	1.0000

O	O70	1.0	0.03890	0.64283	0.93752	1.0000
O	O71	1.0	0.96953	0.81498	0.89242	1.0000
O	O72	1.0	0.96659	0.45711	0.90445	1.0000
O	O73	1.0	0.38044	0.33382	0.43753	1.0000
O	O74	1.0	0.35243	0.17482	0.50488	1.0000
O	O75	1.0	0.23422	0.17966	0.42195	1.0000
O	O76	1.0	0.44387	0.13825	0.41823	1.0000
O	O77	1.0	0.35441	0.49606	0.50156	1.0000
O	O78	1.0	0.22593	0.47082	0.42234	1.0000
O	O79	1.0	0.42733	0.53331	0.40988	1.0000
O	O80	1.0	0.71263	0.35527	0.44134	1.0000
O	O81	1.0	0.83559	0.18971	0.42083	1.0000
O	O82	1.0	0.63946	0.19663	0.38684	1.0000
O	O83	1.0	0.83881	0.52482	0.43416	1.0000
O	O84	1.0	0.63959	0.54054	0.40987	1.0000
O	O85	1.0	0.96837	0.35525	0.43531	1.0000
O	O86	1.0	0.03406	0.17739	0.39162	1.0000
O	O87	1.0	0.03353	0.54464	0.40452	1.0000
O	O88	1.0	0.66769	0.36793	0.70058	1.0000
O	O89	1.0	0.82658	0.33061	0.76369	1.0000
O	O90	1.0	0.83694	0.25194	0.66978	1.0000
O	O91	1.0	0.48744	0.31051	0.74613	1.0000
O	O92	1.0	0.53097	0.23484	0.65422	1.0000
O	O93	1.0	0.48260	0.44021	0.67002	1.0000
O	O94	1.0	0.66439	0.71271	0.69175	1.0000
O	O95	1.0	0.83525	0.84058	0.69681	1.0000
O	O96	1.0	0.84333	0.65901	0.64454	1.0000
O	O97	1.0	0.49416	0.83124	0.69801	1.0000
O	O98	1.0	0.48086	0.64759	0.65009	1.0000
O	O99	1.0	0.66330	0.96469	0.69162	1.0000
O	O100	1.0	0.48358	0.00974	0.64580	1.0000
O	O101	1.0	0.33214	0.63088	0.20106	1.0000
O	O102	1.0	0.17211	0.66999	0.26474	1.0000
O	O103	1.0	0.16483	0.74714	0.17057	1.0000

O	O104	1.0	0.51411	0.68808	0.24605	1.0000
O	O105	1.0	0.46963	0.76313	0.15464	1.0000
O	O106	1.0	0.51680	0.55762	0.16986	1.0000
O	O107	1.0	0.33630	0.28687	0.19196	1.0000
O	O108	1.0	0.16467	0.16076	0.20006	1.0000
O	O109	1.0	0.15560	0.33948	0.14597	1.0000
O	O110	1.0	0.50556	0.16833	0.19717	1.0000
O	O111	1.0	0.51887	0.35089	0.14853	1.0000
O	O112	1.0	0.33559	0.03506	0.19040	1.0000
O	O113	1.0	0.51685	0.98866	0.14537	1.0000
O	O114	1.0	0.01650	0.82123	0.99105	1.0000
O	O115	1.0	0.01224	0.48285	0.00264	1.0000
O	O116	1.0	0.98734	0.17838	0.49007	1.0000
O	O117	1.0	0.98948	0.51385	0.50254	1.0000
O	O118	1.0	0.17974	0.98444	0.25587	1.0000
O	O119	1.0	0.50317	0.98662	0.24567	1.0000
O	O120	1.0	0.82668	0.02042	0.75206	1.0000
O	O121	1.0	0.49175	0.01299	0.74640	1.0000
O	O122	1.0	0.85958	0.46101	0.68987	1.0000
O	O123	1.0	0.47028	0.85721	0.05853	1.0000
O	O124	1.0	0.13941	0.53913	0.19078	1.0000
O	O125	1.0	0.84320	0.96672	0.85984	1.0000
O	O126	1.0	0.14599	0.97245	0.15644	1.0000
O	O127	1.0	0.85008	0.02543	0.65186	1.0000
O	O128	1.0	0.82198	0.17445	0.83208	1.0000
Al	Al1	1.0	0.46504	0.13421	0.62157	1.0000
Al	Al2	1.0	0.86596	0.52887	0.62615	1.0000
Al	Al3	1.0	0.53649	0.86296	0.12212	1.0000
Al	Al4	1.0	0.13425	0.46993	0.12754	1.0000
Al	Al5	1.0	0.15629	0.83789	0.12230	1.0000
Al	Al6	1.0	0.84529	0.16106	0.62088	1.0000
Al	Al7	1.0	0.77904	0.03488	0.81301	1.0000
Si	Si1	1.0	0.33657	0.54417	0.05973	1.0000
Si	Si2	1.0	0.72269	0.79244	0.05628	1.0000

Si	Si3	1.0	0.71140	0.53443	0.05345	1.0000
Si	Si4	1.0	0.96656	0.78914	0.04633	1.0000
Si	Si5	1.0	0.95484	0.53034	0.05340	1.0000
Si	Si6	1.0	0.64994	0.20311	0.54420	1.0000
Si	Si7	1.0	0.66375	0.45422	0.55928	1.0000
Si	Si8	1.0	0.27969	0.20761	0.55594	1.0000
Si	Si9	1.0	0.29060	0.46540	0.55368	1.0000
Si	Si10	1.0	0.03671	0.20995	0.54552	1.0000
Si	Si11	1.0	0.04765	0.46853	0.55313	1.0000
Si	Si12	1.0	0.21005	0.35554	0.30437	1.0000
Si	Si13	1.0	0.46026	0.35152	0.30620	1.0000
Si	Si14	1.0	0.22684	0.71643	0.31633	1.0000
Si	Si15	1.0	0.48246	0.72196	0.30297	1.0000
Si	Si16	1.0	0.22171	0.95795	0.31313	1.0000
Si	Si17	1.0	0.47803	0.96036	0.30418	1.0000
Si	Si18	1.0	0.14980	0.52608	0.38063	1.0000
Si	Si19	1.0	0.79430	0.65144	0.80363	1.0000
Si	Si20	1.0	0.54458	0.65120	0.80701	1.0000
Si	Si21	1.0	0.51547	0.27554	0.80301	1.0000
Si	Si22	1.0	0.51810	0.03983	0.80514	1.0000
Si	Si23	1.0	0.85251	0.48462	0.88040	1.0000
Si	Si24	1.0	0.65092	0.79437	0.94569	1.0000
Si	Si25	1.0	0.65418	0.54510	0.94342	1.0000
Si	Si26	1.0	0.28709	0.77071	0.93514	1.0000
Si	Si27	1.0	0.28169	0.51500	0.94870	1.0000
Si	Si28	1.0	0.04728	0.77229	0.93628	1.0000
Si	Si29	1.0	0.04539	0.51497	0.94562	1.0000
Si	Si30	1.0	0.47993	0.84905	0.87055	1.0000
Si	Si31	1.0	0.35122	0.20742	0.44505	1.0000
Si	Si32	1.0	0.34722	0.45895	0.44312	1.0000
Si	Si33	1.0	0.71580	0.22786	0.43388	1.0000
Si	Si34	1.0	0.71936	0.48347	0.44825	1.0000
Si	Si35	1.0	0.95717	0.22589	0.43529	1.0000
Si	Si36	1.0	0.95772	0.48294	0.44519	1.0000

Si	Si37	1.0	0.52338	0.15276	0.36953	1.0000
Si	Si38	1.0	0.54128	0.33527	0.69113	1.0000
Si	Si39	1.0	0.79317	0.71630	0.69238	1.0000
Si	Si40	1.0	0.53538	0.71053	0.69684	1.0000
Si	Si41	1.0	0.53199	0.95603	0.69469	1.0000
Si	Si42	1.0	0.45848	0.66289	0.19153	1.0000
Si	Si43	1.0	0.20754	0.28520	0.19385	1.0000
Si	Si44	1.0	0.46555	0.28972	0.19604	1.0000
Si	Si45	1.0	0.46718	0.04404	0.19361	1.0000
Si	Si46	1.0	0.52981	0.47040	0.12514	1.0000
Si	Si47	1.0	0.47100	0.52865	0.62592	1.0000
Si	Si48	1.0	0.15558	0.15814	0.37406	1.0000
Si	Si49	1.0	0.53469	0.53709	0.37529	1.0000
Si	Si50	1.0	0.46965	0.46549	0.87562	1.0000
Si	Si51	1.0	0.79343	0.34485	0.70411	1.0000
Si	Si52	1.0	0.35108	0.79645	0.04546	1.0000
Si	Si53	1.0	0.20636	0.65499	0.20583	1.0000
Si	Si54	1.0	0.84934	0.84374	0.87576	1.0000
Si	Si55	1.0	0.21171	0.04185	0.20340	1.0000
Si	Si56	1.0	0.78896	0.96035	0.70191	1.0000
Si	Si57	1.0	0.77014	0.29449	0.81582	1.0000

AlSiAl-T2T7T7T7T7T9T9

data_image0
_chemical_formula_structural H7O128Al7Si57
_chemical_formula_sum "H7 O128 Al7 Si57"
_cell_length_a 12.5592
_cell_length_b 12.5246
_cell_length_c 26.4922
_cell_angle_alpha 89.7137
_cell_angle_beta 89.9178
_cell_angle_gamma 91.1528

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H H1 1.0 0.47376 0.14569 0.53168 1.0000
H H2 1.0 0.86160 0.51460 0.71729 1.0000
H H3 1.0 0.52456 0.85301 0.02892 1.0000
H H4 1.0 0.13940 0.48704 0.21826 1.0000
H H5 1.0 0.08104 0.01117 0.14263 1.0000
H H6 1.0 0.91619 0.99107 0.64339 1.0000
H H7 1.0 0.58245 0.83801 0.34670 1.0000
O O1 1.0 0.36833 0.67186 0.04818 1.0000

:

O	O2	1.0	0.32373	0.83104	0.98544	1.0000
O	O3	1.0	0.26734	0.84610	0.08361	1.0000
O	O4	1.0	0.31079	0.48647	0.00650	1.0000
O	O5	1.0	0.23468	0.54089	0.09638	1.0000
O	O6	1.0	0.43955	0.48900	0.08305	1.0000
O	O7	1.0	0.71563	0.66285	0.05973	1.0000
O	O8	1.0	0.84337	0.83431	0.04780	1.0000
O	O9	1.0	0.66544	0.84612	0.10299	1.0000
O	O10	1.0	0.83020	0.48909	0.05261	1.0000
O	O11	1.0	0.64720	0.48096	0.10149	1.0000
O	O12	1.0	0.96064	0.66131	0.05163	1.0000
O	O13	1.0	0.03645	0.84501	0.08932	1.0000
O	O14	1.0	0.00988	0.48732	0.10344	1.0000
O	O15	1.0	0.62944	0.33088	0.54895	1.0000
O	O16	1.0	0.67450	0.17089	0.48751	1.0000
O	O17	1.0	0.73022	0.15644	0.58556	1.0000
O	O18	1.0	0.52990	0.14269	0.55842	1.0000
O	O19	1.0	0.68569	0.51726	0.50581	1.0000
O	O20	1.0	0.76648	0.46124	0.59486	1.0000
O	O21	1.0	0.56146	0.51483	0.58364	1.0000
O	O22	1.0	0.28445	0.33554	0.56084	1.0000
O	O23	1.0	0.15501	0.16536	0.55044	1.0000
O	O24	1.0	0.33315	0.15339	0.60535	1.0000
O	O25	1.0	0.17142	0.51055	0.55259	1.0000
O	O26	1.0	0.35340	0.51865	0.60131	1.0000
O	O27	1.0	0.03922	0.34013	0.55274	1.0000
O	O28	1.0	0.96123	0.15615	0.59044	1.0000
O	O29	1.0	0.99041	0.51584	0.60257	1.0000
O	O30	1.0	0.33704	0.38554	0.30970	1.0000
O	O31	1.0	0.17265	0.35452	0.24540	1.0000
O	O32	1.0	0.18826	0.23674	0.32837	1.0000
O	O33	1.0	0.14200	0.44622	0.33190	1.0000
O	O34	1.0	0.50111	0.34440	0.24954	1.0000
O	O35	1.0	0.46499	0.22491	0.33185	1.0000

O	O36	1.0	0.53572	0.42554	0.33932	1.0000
O	O37	1.0	0.35397	0.72712	0.30910	1.0000
O	O38	1.0	0.17881	0.83650	0.32652	1.0000
O	O39	1.0	0.19960	0.64130	0.36314	1.0000
O	O40	1.0	0.53440	0.63685	0.34193	1.0000
O	O41	1.0	0.34170	0.97566	0.31681	1.0000
O	O42	1.0	0.15224	0.03522	0.35163	1.0000
O	O43	1.0	0.54985	0.03578	0.34850	1.0000
O	O44	1.0	0.66616	0.61205	0.80987	1.0000
O	O45	1.0	0.82776	0.64457	0.74444	1.0000
O	O46	1.0	0.81441	0.76328	0.82640	1.0000
O	O47	1.0	0.86205	0.55410	0.83176	1.0000
O	O48	1.0	0.50143	0.64781	0.74905	1.0000
O	O49	1.0	0.53456	0.76898	0.82963	1.0000
O	O50	1.0	0.46748	0.56776	0.83986	1.0000
O	O51	1.0	0.64638	0.28593	0.81029	1.0000
O	O52	1.0	0.81430	0.16362	0.82655	1.0000
O	O53	1.0	0.80691	0.35763	0.86381	1.0000
O	O54	1.0	0.48018	0.15751	0.81767	1.0000
O	O55	1.0	0.46081	0.35576	0.84309	1.0000
O	O56	1.0	0.65042	0.02749	0.81449	1.0000
O	O57	1.0	0.45968	0.96106	0.84360	1.0000
O	O58	1.0	0.61973	0.66402	0.93799	1.0000
O	O59	1.0	0.65011	0.82380	0.00459	1.0000
O	O60	1.0	0.76558	0.81748	0.92084	1.0000
O	O61	1.0	0.55597	0.85978	0.91912	1.0000
O	O62	1.0	0.64803	0.50254	0.00227	1.0000
O	O63	1.0	0.77513	0.52820	0.92246	1.0000
O	O64	1.0	0.57396	0.46418	0.91094	1.0000
O	O65	1.0	0.28720	0.64507	0.94188	1.0000
O	O66	1.0	0.16416	0.80984	0.91979	1.0000
O	O67	1.0	0.36128	0.80271	0.88697	1.0000
O	O68	1.0	0.16200	0.47543	0.93437	1.0000
O	O69	1.0	0.36184	0.45963	0.91100	1.0000

O	O70	1.0	0.03156	0.64467	0.93530	1.0000
O	O71	1.0	0.96603	0.82288	0.89167	1.0000
O	O72	1.0	0.96778	0.45506	0.90475	1.0000
O	O73	1.0	0.37320	0.32970	0.43851	1.0000
O	O74	1.0	0.34723	0.17195	0.50650	1.0000
O	O75	1.0	0.23574	0.16848	0.42102	1.0000
O	O76	1.0	0.44788	0.13732	0.42271	1.0000
O	O77	1.0	0.35379	0.49337	0.50232	1.0000
O	O78	1.0	0.22415	0.47217	0.42353	1.0000
O	O79	1.0	0.42771	0.52711	0.41087	1.0000
O	O80	1.0	0.71870	0.35707	0.44468	1.0000
O	O81	1.0	0.83581	0.19001	0.42212	1.0000
O	O82	1.0	0.63837	0.20472	0.38932	1.0000
O	O83	1.0	0.83920	0.53003	0.43519	1.0000
O	O84	1.0	0.64041	0.53844	0.40908	1.0000
O	O85	1.0	0.96579	0.35785	0.43588	1.0000
O	O86	1.0	0.03438	0.18163	0.39320	1.0000
O	O87	1.0	0.03328	0.54603	0.40331	1.0000
O	O88	1.0	0.66775	0.36828	0.70079	1.0000
O	O89	1.0	0.82750	0.33126	0.76455	1.0000
O	O90	1.0	0.83549	0.25185	0.67099	1.0000
O	O91	1.0	0.48698	0.30958	0.74658	1.0000
O	O92	1.0	0.52979	0.23723	0.65447	1.0000
O	O93	1.0	0.48301	0.44241	0.67127	1.0000
O	O94	1.0	0.66356	0.71331	0.69219	1.0000
O	O95	1.0	0.83560	0.83821	0.69995	1.0000
O	O96	1.0	0.84265	0.66020	0.64520	1.0000
O	O97	1.0	0.49428	0.83155	0.69844	1.0000
O	O98	1.0	0.48081	0.64910	0.64965	1.0000
O	O99	1.0	0.66452	0.96412	0.69183	1.0000
O	O100	1.0	0.48508	0.01088	0.64599	1.0000
O	O101	1.0	0.33271	0.63483	0.20042	1.0000
O	O102	1.0	0.17436	0.67025	0.26427	1.0000
O	O103	1.0	0.16399	0.74998	0.17002	1.0000

O	O104	1.0	0.51285	0.69324	0.24514	1.0000
O	O105	1.0	0.47014	0.76632	0.15281	1.0000
O	O106	1.0	0.51730	0.56047	0.17046	1.0000
O	O107	1.0	0.33603	0.28757	0.19317	1.0000
O	O108	1.0	0.16359	0.16196	0.20004	1.0000
O	O109	1.0	0.15674	0.34164	0.14625	1.0000
O	O110	1.0	0.50406	0.16612	0.19585	1.0000
O	O111	1.0	0.51734	0.35333	0.15008	1.0000
O	O112	1.0	0.33319	0.03545	0.18916	1.0000
O	O113	1.0	0.51003	0.99344	0.13974	1.0000
O	O114	1.0	0.01396	0.82137	0.99012	1.0000
O	O115	1.0	0.01114	0.48631	0.00284	1.0000
O	O116	1.0	0.98715	0.18119	0.49148	1.0000
O	O117	1.0	0.99249	0.51572	0.50203	1.0000
O	O118	1.0	0.17491	0.98309	0.25442	1.0000
O	O119	1.0	0.50410	0.97763	0.24055	1.0000
O	O120	1.0	0.82175	0.01455	0.75596	1.0000
O	O121	1.0	0.49623	0.01397	0.74647	1.0000
O	O122	1.0	0.85959	0.46066	0.68983	1.0000
O	O123	1.0	0.46848	0.85863	0.05558	1.0000
O	O124	1.0	0.14080	0.54104	0.19058	1.0000
O	O125	1.0	0.83353	0.96365	0.85377	1.0000
O	O126	1.0	0.14441	0.97521	0.15489	1.0000
O	O127	1.0	0.85305	0.02649	0.65628	1.0000
O	O128	1.0	0.53052	0.83581	0.31943	1.0000
Al	Al1	1.0	0.46424	0.13625	0.62244	1.0000
Al	Al2	1.0	0.86548	0.53010	0.62656	1.0000
Al	Al3	1.0	0.53432	0.86718	0.11921	1.0000
Al	Al4	1.0	0.13445	0.47181	0.12750	1.0000
Al	Al5	1.0	0.15540	0.84131	0.12135	1.0000
Al	Al6	1.0	0.84267	0.16149	0.62259	1.0000
Al	Al7	1.0	0.47552	0.96975	0.30344	1.0000
Si	Si1	1.0	0.33594	0.54675	0.05973	1.0000
Si	Si2	1.0	0.72174	0.79207	0.05594	1.0000

Si	Si3	1.0	0.71089	0.53418	0.05435	1.0000
Si	Si4	1.0	0.96501	0.79026	0.04586	1.0000
Si	Si5	1.0	0.95383	0.53146	0.05378	1.0000
Si	Si6	1.0	0.64916	0.20369	0.54565	1.0000
Si	Si7	1.0	0.66327	0.45591	0.55955	1.0000
Si	Si8	1.0	0.27709	0.20630	0.55774	1.0000
Si	Si9	1.0	0.29010	0.46409	0.55475	1.0000
Si	Si10	1.0	0.03432	0.21119	0.54735	1.0000
Si	Si11	1.0	0.04727	0.46995	0.55362	1.0000
Si	Si12	1.0	0.21070	0.35431	0.30475	1.0000
Si	Si13	1.0	0.45997	0.34382	0.30747	1.0000
Si	Si14	1.0	0.22519	0.71936	0.31586	1.0000
Si	Si15	1.0	0.21568	0.95912	0.31258	1.0000
Si	Si16	1.0	0.15027	0.52633	0.38038	1.0000
Si	Si17	1.0	0.79189	0.64459	0.80420	1.0000
Si	Si18	1.0	0.54183	0.64884	0.80713	1.0000
Si	Si19	1.0	0.77366	0.28431	0.81635	1.0000
Si	Si20	1.0	0.51839	0.27831	0.80381	1.0000
Si	Si21	1.0	0.52276	0.03985	0.80488	1.0000
Si	Si22	1.0	0.85200	0.47380	0.88068	1.0000
Si	Si23	1.0	0.64954	0.79034	0.94496	1.0000
Si	Si24	1.0	0.65412	0.53909	0.94367	1.0000
Si	Si25	1.0	0.28348	0.77236	0.93374	1.0000
Si	Si26	1.0	0.28090	0.51679	0.94889	1.0000
Si	Si27	1.0	0.04298	0.77404	0.93509	1.0000
Si	Si28	1.0	0.04293	0.51700	0.94537	1.0000
Si	Si29	1.0	0.47752	0.84684	0.87017	1.0000
Si	Si30	1.0	0.34901	0.20211	0.44617	1.0000
Si	Si31	1.0	0.34459	0.45543	0.44422	1.0000
Si	Si32	1.0	0.71711	0.22986	0.43586	1.0000
Si	Si33	1.0	0.72080	0.48543	0.44918	1.0000
Si	Si34	1.0	0.95673	0.22830	0.43643	1.0000
Si	Si35	1.0	0.95807	0.48573	0.44505	1.0000
Si	Si36	1.0	0.52607	0.14906	0.37306	1.0000

Si	Si37	1.0	0.54151	0.33630	0.69191	1.0000
Si	Si38	1.0	0.79210	0.71413	0.69355	1.0000
Si	Si39	1.0	0.53458	0.71013	0.69694	1.0000
Si	Si40	1.0	0.53307	0.95578	0.69466	1.0000
Si	Si41	1.0	0.45823	0.66664	0.18994	1.0000
Si	Si42	1.0	0.20755	0.28591	0.19427	1.0000
Si	Si43	1.0	0.46507	0.28743	0.19667	1.0000
Si	Si44	1.0	0.46572	0.04123	0.19112	1.0000
Si	Si45	1.0	0.52908	0.47234	0.12609	1.0000
Si	Si46	1.0	0.47074	0.52945	0.62634	1.0000
Si	Si47	1.0	0.15304	0.15527	0.37397	1.0000
Si	Si48	1.0	0.53379	0.52868	0.37593	1.0000
Si	Si49	1.0	0.46686	0.46271	0.87639	1.0000
Si	Si50	1.0	0.79344	0.34485	0.70561	1.0000
Si	Si51	1.0	0.34853	0.79885	0.04388	1.0000
Si	Si52	1.0	0.20659	0.65740	0.20504	1.0000
Si	Si53	1.0	0.77888	0.04206	0.81301	1.0000
Si	Si54	1.0	0.84517	0.84159	0.87350	1.0000
Si	Si55	1.0	0.21008	0.04226	0.20265	1.0000
Si	Si56	1.0	0.78855	0.95714	0.70374	1.0000
Si	Si57	1.0	0.47972	0.71503	0.30233	1.0000

AlSiAl-T7T7T7T7T9T9T9

data_image0
_chemical_formula_structural H7O128Al7Si57
_chemical_formula_sum "H7 O128 Al7 Si57"
_cell_length_a 12.5799
_cell_length_b 12.5243
_cell_length_c 26.5118
_cell_angle_alpha 90.2782
_cell_angle_beta 89.6145
_cell_angle_gamma 91.0874

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47432	0.14111	0.53111	1.0000
H	H2	1.0	0.85555	0.52079	0.71380	1.0000
H	H3	1.0	0.52901	0.85279	0.03451	1.0000
H	H4	1.0	0.13291	0.48512	0.21799	1.0000
H	H5	1.0	0.90437	0.02069	0.86917	1.0000
H	H6	1.0	0.08465	0.00719	0.14443	1.0000
H	H7	1.0	0.91400	0.99155	0.64054	1.0000
O	O1	1.0	0.37142	0.67014	0.05046	1.0000

O	O2	1.0	0.33797	0.83102	0.98771	1.0000
O	O3	1.0	0.26669	0.84417	0.08386	1.0000
O	O4	1.0	0.30681	0.48833	0.00630	1.0000
O	O5	1.0	0.23944	0.53716	0.09843	1.0000
O	O6	1.0	0.44196	0.48383	0.07994	1.0000
O	O7	1.0	0.71745	0.65774	0.05625	1.0000
O	O8	1.0	0.84257	0.83175	0.05155	1.0000
O	O9	1.0	0.66541	0.83184	0.10781	1.0000
O	O10	1.0	0.83380	0.48520	0.05218	1.0000
O	O11	1.0	0.64849	0.47728	0.09907	1.0000
O	O12	1.0	0.96154	0.65972	0.05233	1.0000
O	O13	1.0	0.03537	0.84151	0.09300	1.0000
O	O14	1.0	0.01489	0.48301	0.10022	1.0000
O	O15	1.0	0.62522	0.32790	0.54857	1.0000
O	O16	1.0	0.67202	0.16856	0.48614	1.0000
O	O17	1.0	0.73089	0.15605	0.58357	1.0000
O	O18	1.0	0.52991	0.13817	0.55786	1.0000
O	O19	1.0	0.67717	0.51245	0.50482	1.0000
O	O20	1.0	0.76888	0.45683	0.59087	1.0000
O	O21	1.0	0.56387	0.51230	0.58713	1.0000
O	O22	1.0	0.28426	0.33490	0.55985	1.0000
O	O23	1.0	0.15572	0.16426	0.54853	1.0000
O	O24	1.0	0.33231	0.15280	0.60378	1.0000
O	O25	1.0	0.17204	0.50989	0.55301	1.0000
O	O26	1.0	0.35406	0.51627	0.60155	1.0000
O	O27	1.0	0.04043	0.33888	0.55209	1.0000
O	O28	1.0	0.96211	0.15614	0.58975	1.0000
O	O29	1.0	0.99074	0.51570	0.60239	1.0000
O	O30	1.0	0.33610	0.38555	0.30932	1.0000
O	O31	1.0	0.17235	0.35217	0.24555	1.0000
O	O32	1.0	0.18856	0.23621	0.32840	1.0000
O	O33	1.0	0.14130	0.44504	0.33236	1.0000
O	O34	1.0	0.50042	0.35044	0.24793	1.0000
O	O35	1.0	0.46921	0.23013	0.32951	1.0000

:

O	O36	1.0	0.53422	0.43227	0.33780	1.0000
O	O37	1.0	0.35211	0.71394	0.30992	1.0000
O	O38	1.0	0.18409	0.83557	0.32626	1.0000
O	O39	1.0	0.19174	0.64244	0.36405	1.0000
O	O40	1.0	0.51935	0.84064	0.31506	1.0000
O	O41	1.0	0.53640	0.64491	0.34415	1.0000
O	O42	1.0	0.34936	0.97112	0.31634	1.0000
O	O43	1.0	0.16341	0.03509	0.35283	1.0000
O	O44	1.0	0.54038	0.03604	0.34409	1.0000
O	O45	1.0	0.66581	0.61377	0.80671	1.0000
O	O46	1.0	0.82507	0.64340	0.73976	1.0000
O	O47	1.0	0.81234	0.77040	0.81982	1.0000
O	O48	1.0	0.86246	0.56155	0.82806	1.0000
O	O49	1.0	0.49836	0.65567	0.74992	1.0000
O	O50	1.0	0.53858	0.77248	0.83194	1.0000
O	O51	1.0	0.46826	0.57234	0.83980	1.0000
O	O52	1.0	0.64913	0.29211	0.80970	1.0000
O	O53	1.0	0.81862	0.17239	0.82242	1.0000
O	O54	1.0	0.81243	0.36563	0.86164	1.0000
O	O55	1.0	0.48785	0.16033	0.82006	1.0000
O	O56	1.0	0.46154	0.36083	0.84113	1.0000
O	O57	1.0	0.65624	0.02823	0.81656	1.0000
O	O58	1.0	0.46648	0.96483	0.84742	1.0000
O	O59	1.0	0.61633	0.66476	0.94224	1.0000
O	O60	1.0	0.64797	0.82530	0.00884	1.0000
O	O61	1.0	0.76133	0.81982	0.92368	1.0000
O	O62	1.0	0.55325	0.86023	0.92357	1.0000
O	O63	1.0	0.65517	0.49460	0.99949	1.0000
O	O64	1.0	0.77691	0.53836	0.91932	1.0000
O	O65	1.0	0.57866	0.46722	0.90815	1.0000
O	O66	1.0	0.29173	0.64844	0.94265	1.0000
O	O67	1.0	0.17160	0.81896	0.92700	1.0000
O	O68	1.0	0.36227	0.80697	0.88775	1.0000
O	O69	1.0	0.16477	0.48067	0.93181	1.0000

O	O70	1.0	0.36674	0.46278	0.91176	1.0000
O	O71	1.0	0.03887	0.65275	0.93660	1.0000
O	O72	1.0	0.97818	0.83458	0.89416	1.0000
O	O73	1.0	0.97119	0.46776	0.90097	1.0000
O	O74	1.0	0.37479	0.33193	0.43793	1.0000
O	O75	1.0	0.34936	0.17231	0.50513	1.0000
O	O76	1.0	0.23295	0.17461	0.42215	1.0000
O	O77	1.0	0.44360	0.13849	0.41894	1.0000
O	O78	1.0	0.35413	0.49415	0.50239	1.0000
O	O79	1.0	0.22502	0.47404	0.42338	1.0000
O	O80	1.0	0.42860	0.53000	0.41115	1.0000
O	O81	1.0	0.71326	0.35312	0.44188	1.0000
O	O82	1.0	0.83517	0.18658	0.42172	1.0000
O	O83	1.0	0.63931	0.19407	0.38757	1.0000
O	O84	1.0	0.83730	0.52431	0.43758	1.0000
O	O85	1.0	0.64138	0.53754	0.40812	1.0000
O	O86	1.0	0.96514	0.35381	0.43613	1.0000
O	O87	1.0	0.03355	0.17670	0.39231	1.0000
O	O88	1.0	0.03070	0.54197	0.40401	1.0000
O	O89	1.0	0.66583	0.37106	0.69935	1.0000
O	O90	1.0	0.82776	0.33939	0.76186	1.0000
O	O91	1.0	0.83305	0.25318	0.66965	1.0000
O	O92	1.0	0.48909	0.30347	0.74578	1.0000
O	O93	1.0	0.52811	0.24201	0.65162	1.0000
O	O94	1.0	0.47891	0.44459	0.67401	1.0000
O	O95	1.0	0.65984	0.71675	0.69110	1.0000
O	O96	1.0	0.83360	0.83831	0.69643	1.0000
O	O97	1.0	0.83488	0.66051	0.64054	1.0000
O	O98	1.0	0.49177	0.83534	0.69761	1.0000
O	O99	1.0	0.47685	0.64982	0.65058	1.0000
O	O100	1.0	0.66362	0.96699	0.69141	1.0000
O	O101	1.0	0.48248	0.01672	0.64888	1.0000
O	O102	1.0	0.33117	0.62484	0.20170	1.0000
O	O103	1.0	0.17130	0.66746	0.26469	1.0000

O	O104	1.0	0.16779	0.74598	0.17073	1.0000
O	O105	1.0	0.51187	0.68129	0.24692	1.0000
O	O106	1.0	0.46347	0.76554	0.15801	1.0000
O	O107	1.0	0.51708	0.55977	0.16734	1.0000
O	O108	1.0	0.33677	0.28714	0.19236	1.0000
O	O109	1.0	0.16706	0.15964	0.20005	1.0000
O	O110	1.0	0.15640	0.33823	0.14634	1.0000
O	O111	1.0	0.50628	0.16882	0.19644	1.0000
O	O112	1.0	0.51754	0.35185	0.14820	1.0000
O	O113	1.0	0.33813	0.03416	0.18926	1.0000
O	O114	1.0	0.52283	0.98734	0.14699	1.0000
O	O115	1.0	0.01429	0.82493	0.99380	1.0000
O	O116	1.0	0.01150	0.48830	0.99963	1.0000
O	O117	1.0	0.98663	0.17820	0.49082	1.0000
O	O118	1.0	0.99355	0.51354	0.50225	1.0000
O	O119	1.0	0.18321	0.98346	0.25532	1.0000
O	O120	1.0	0.50201	0.98970	0.24701	1.0000
O	O121	1.0	0.82311	0.01446	0.75393	1.0000
O	O122	1.0	0.50048	0.01372	0.74950	1.0000
O	O123	1.0	0.85634	0.46432	0.68679	1.0000
O	O124	1.0	0.47145	0.85713	0.06110	1.0000
O	O125	1.0	0.13691	0.53821	0.19037	1.0000
O	O126	1.0	0.84631	0.98050	0.85312	1.0000
O	O127	1.0	0.14828	0.97168	0.15634	1.0000
O	O128	1.0	0.85176	0.02743	0.65439	1.0000
Al	Al1	1.0	0.46273	0.13802	0.62161	1.0000
Al	Al2	1.0	0.86345	0.53019	0.62343	1.0000
Al	Al3	1.0	0.53612	0.85979	0.12451	1.0000
Al	Al4	1.0	0.13621	0.46833	0.12704	1.0000
Al	Al5	1.0	0.84894	0.83565	0.87464	1.0000
Al	Al6	1.0	0.15642	0.83649	0.12257	1.0000
Al	Al7	1.0	0.84220	0.16286	0.62086	1.0000
Si	Si1	1.0	0.33765	0.54489	0.05992	1.0000
Si	Si2	1.0	0.72148	0.78706	0.05812	1.0000

Si	Si3	1.0	0.71407	0.52896	0.05221	1.0000
Si	Si4	1.0	0.96468	0.78913	0.04845	1.0000
Si	Si5	1.0	0.95650	0.52983	0.05216	1.0000
Si	Si6	1.0	0.64783	0.20137	0.54452	1.0000
Si	Si7	1.0	0.66112	0.45265	0.55896	1.0000
Si	Si8	1.0	0.27733	0.20575	0.55628	1.0000
Si	Si9	1.0	0.29066	0.46353	0.55455	1.0000
Si	Si10	1.0	0.03496	0.20996	0.54626	1.0000
Si	Si11	1.0	0.04834	0.46886	0.55352	1.0000
Si	Si12	1.0	0.21043	0.35368	0.30470	1.0000
Si	Si13	1.0	0.46042	0.34950	0.30612	1.0000
Si	Si14	1.0	0.22489	0.71492	0.31613	1.0000
Si	Si15	1.0	0.48011	0.71927	0.30330	1.0000
Si	Si16	1.0	0.22126	0.95671	0.31290	1.0000
Si	Si17	1.0	0.47652	0.95933	0.30492	1.0000
Si	Si18	1.0	0.14827	0.52577	0.38103	1.0000
Si	Si19	1.0	0.79082	0.65072	0.80023	1.0000
Si	Si20	1.0	0.54269	0.65341	0.80725	1.0000
Si	Si21	1.0	0.77623	0.29451	0.81402	1.0000
Si	Si22	1.0	0.52122	0.28081	0.80352	1.0000
Si	Si23	1.0	0.52708	0.04119	0.80760	1.0000
Si	Si24	1.0	0.85499	0.48449	0.87761	1.0000
Si	Si25	1.0	0.64866	0.79176	0.94852	1.0000
Si	Si26	1.0	0.65656	0.54160	0.94266	1.0000
Si	Si27	1.0	0.28984	0.77624	0.93652	1.0000
Si	Si28	1.0	0.28275	0.52030	0.94852	1.0000
Si	Si29	1.0	0.04834	0.78286	0.93790	1.0000
Si	Si30	1.0	0.04636	0.52457	0.94334	1.0000
Si	Si31	1.0	0.48042	0.84907	0.87323	1.0000
Si	Si32	1.0	0.34853	0.20514	0.44533	1.0000
Si	Si33	1.0	0.34560	0.45812	0.44379	1.0000
Si	Si34	1.0	0.71554	0.22547	0.43437	1.0000
Si	Si35	1.0	0.71710	0.48169	0.44847	1.0000
Si	Si36	1.0	0.95593	0.22442	0.43593	1.0000

Si	Si37	1.0	0.95668	0.48181	0.44583	1.0000
Si	Si38	1.0	0.52334	0.15106	0.37020	1.0000
Si	Si39	1.0	0.53997	0.33765	0.69126	1.0000
Si	Si40	1.0	0.78807	0.71435	0.69012	1.0000
Si	Si41	1.0	0.53127	0.71344	0.69705	1.0000
Si	Si42	1.0	0.53226	0.95880	0.69576	1.0000
Si	Si43	1.0	0.45620	0.66068	0.19208	1.0000
Si	Si44	1.0	0.20843	0.28447	0.19412	1.0000
Si	Si45	1.0	0.46559	0.29004	0.19573	1.0000
Si	Si46	1.0	0.46915	0.04420	0.19393	1.0000
Si	Si47	1.0	0.53015	0.47010	0.12356	1.0000
Si	Si48	1.0	0.46931	0.52897	0.62795	1.0000
Si	Si49	1.0	0.15438	0.15610	0.37421	1.0000
Si	Si50	1.0	0.53423	0.53528	0.37544	1.0000
Si	Si51	1.0	0.46948	0.46713	0.87560	1.0000
Si	Si52	1.0	0.79176	0.34936	0.70312	1.0000
Si	Si53	1.0	0.35354	0.79750	0.04639	1.0000
Si	Si54	1.0	0.20623	0.65237	0.20576	1.0000
Si	Si55	1.0	0.78078	0.05199	0.80912	1.0000
Si	Si56	1.0	0.21468	0.04084	0.20281	1.0000
Si	Si57	1.0	0.78771	0.95719	0.70121	1.0000

AlSiAl-T1T1T7T7T7T9T9

data_image0
_chemical_formula_structural H8O128Al8Si56
_chemical_formula_sum "H8 O128 Al8 Si56"
_cell_length_a 12.5218
_cell_length_b 12.5274
_cell_length_c 26.5272
_cell_angle_alpha 90.0813
_cell_angle_beta 89.8982
_cell_angle_gamma 91.4987

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47347	0.14398	0.53095	1.0000
H	H2	1.0	0.85847	0.51725	0.71730	1.0000
H	H3	1.0	0.52728	0.85484	0.03152	1.0000
H	H4	1.0	0.14074	0.48307	0.21768	1.0000
H	H5	1.0	0.09086	0.01240	0.13780	1.0000
H	H6	1.0	0.90957	0.98818	0.63770	1.0000
H	H7	1.0	0.87118	0.17656	0.86050	1.0000
H	H8	1.0	0.12768	0.82451	0.36025	1.0000

O	O1	1.0	0.37354	0.66784	0.04856	1.0000
O	O2	1.0	0.32973	0.82738	0.98671	1.0000
O	O3	1.0	0.26856	0.83914	0.08418	1.0000
O	O4	1.0	0.31013	0.48310	0.00612	1.0000
O	O5	1.0	0.23407	0.53999	0.09581	1.0000
O	O6	1.0	0.43786	0.48282	0.08274	1.0000
O	O7	1.0	0.71586	0.66461	0.05798	1.0000
O	O8	1.0	0.84512	0.83496	0.04714	1.0000
O	O9	1.0	0.66809	0.84596	0.10365	1.0000
O	O10	1.0	0.82932	0.48937	0.05122	1.0000
O	O11	1.0	0.64689	0.48290	0.10010	1.0000
O	O12	1.0	0.96103	0.66024	0.05048	1.0000
O	O13	1.0	0.03738	0.84286	0.08942	1.0000
O	O14	1.0	0.00875	0.48726	0.10312	1.0000
O	O15	1.0	0.62655	0.33168	0.54856	1.0000
O	O16	1.0	0.67028	0.17309	0.48592	1.0000
O	O17	1.0	0.73183	0.16007	0.58332	1.0000
O	O18	1.0	0.52981	0.14095	0.55772	1.0000
O	O19	1.0	0.68761	0.51688	0.50605	1.0000
O	O20	1.0	0.76753	0.45960	0.59480	1.0000
O	O21	1.0	0.56346	0.51659	0.58413	1.0000
O	O22	1.0	0.28541	0.33479	0.55810	1.0000
O	O23	1.0	0.15575	0.16469	0.54659	1.0000
O	O24	1.0	0.33218	0.15252	0.60301	1.0000
O	O25	1.0	0.17199	0.51023	0.55163	1.0000
O	O26	1.0	0.35391	0.51635	0.60064	1.0000
O	O27	1.0	0.04033	0.33954	0.54955	1.0000
O	O28	1.0	0.96317	0.15726	0.58888	1.0000
O	O29	1.0	0.99239	0.51120	0.60366	1.0000
O	O30	1.0	0.33325	0.38874	0.30913	1.0000
O	O31	1.0	0.17168	0.35107	0.24437	1.0000
O	O32	1.0	0.18978	0.23079	0.32651	1.0000
O	O33	1.0	0.13566	0.43768	0.33226	1.0000
O	O34	1.0	0.49846	0.35310	0.24817	1.0000

:

O	O35	1.0	0.46401	0.23192	0.32909	1.0000
O	O36	1.0	0.53340	0.43369	0.33814	1.0000
O	O37	1.0	0.35608	0.72607	0.30908	1.0000
O	O38	1.0	0.20247	0.63044	0.36318	1.0000
O	O39	1.0	0.53152	0.84412	0.31539	1.0000
O	O40	1.0	0.53616	0.64576	0.34333	1.0000
O	O41	1.0	0.35792	0.96759	0.31595	1.0000
O	O42	1.0	0.15668	0.03408	0.35934	1.0000
O	O43	1.0	0.54913	0.04259	0.34119	1.0000
O	O44	1.0	0.66854	0.61300	0.80959	1.0000
O	O45	1.0	0.82889	0.64984	0.74394	1.0000
O	O46	1.0	0.81359	0.76986	0.82656	1.0000
O	O47	1.0	0.86623	0.56254	0.83146	1.0000
O	O48	1.0	0.50306	0.64879	0.74903	1.0000
O	O49	1.0	0.53872	0.77063	0.82969	1.0000
O	O50	1.0	0.46823	0.56931	0.83909	1.0000
O	O51	1.0	0.64414	0.27501	0.80899	1.0000
O	O52	1.0	0.79838	0.37048	0.86259	1.0000
O	O53	1.0	0.46907	0.15678	0.81655	1.0000
O	O54	1.0	0.46411	0.35710	0.84231	1.0000
O	O55	1.0	0.64256	0.03302	0.81577	1.0000
O	O56	1.0	0.45188	0.95894	0.84246	1.0000
O	O57	1.0	0.61409	0.66909	0.93901	1.0000
O	O58	1.0	0.65012	0.82855	0.00502	1.0000
O	O59	1.0	0.77005	0.81394	0.92278	1.0000
O	O60	1.0	0.56196	0.86719	0.91762	1.0000
O	O61	1.0	0.64737	0.50446	0.00089	1.0000
O	O62	1.0	0.77518	0.54073	0.92199	1.0000
O	O63	1.0	0.57632	0.46804	0.90941	1.0000
O	O64	1.0	0.28513	0.64217	0.94306	1.0000
O	O65	1.0	0.16902	0.80957	0.92093	1.0000
O	O66	1.0	0.36789	0.79671	0.88890	1.0000
O	O67	1.0	0.16200	0.46970	0.93366	1.0000
O	O68	1.0	0.36334	0.45973	0.91031	1.0000

O	O69	1.0	0.03772	0.64230	0.93686	1.0000
O	O70	1.0	0.97011	0.81520	0.89162	1.0000
O	O71	1.0	0.96464	0.45618	0.90479	1.0000
O	O72	1.0	0.38662	0.33144	0.43892	1.0000
O	O73	1.0	0.35119	0.17127	0.50446	1.0000
O	O74	1.0	0.23122	0.18612	0.42261	1.0000
O	O75	1.0	0.43985	0.13422	0.41671	1.0000
O	O76	1.0	0.35432	0.49550	0.50142	1.0000
O	O77	1.0	0.22612	0.46079	0.42271	1.0000
O	O78	1.0	0.42550	0.53230	0.40988	1.0000
O	O79	1.0	0.71576	0.35852	0.44272	1.0000
O	O80	1.0	0.83228	0.19095	0.42069	1.0000
O	O81	1.0	0.63429	0.20421	0.38798	1.0000
O	O82	1.0	0.83883	0.53149	0.43477	1.0000
O	O83	1.0	0.63853	0.54108	0.40989	1.0000
O	O84	1.0	0.96213	0.35854	0.43789	1.0000
O	O85	1.0	0.03154	0.18793	0.39113	1.0000
O	O86	1.0	0.03626	0.54414	0.40541	1.0000
O	O87	1.0	0.66682	0.36613	0.70062	1.0000
O	O88	1.0	0.82617	0.32985	0.76379	1.0000
O	O89	1.0	0.83736	0.25331	0.66960	1.0000
O	O90	1.0	0.48554	0.30920	0.74592	1.0000
O	O91	1.0	0.52811	0.23499	0.65384	1.0000
O	O92	1.0	0.48276	0.44065	0.67048	1.0000
O	O93	1.0	0.66375	0.71174	0.69068	1.0000
O	O94	1.0	0.83419	0.84126	0.69701	1.0000
O	O95	1.0	0.84484	0.65970	0.64490	1.0000
O	O96	1.0	0.49427	0.83116	0.69821	1.0000
O	O97	1.0	0.47840	0.64786	0.65019	1.0000
O	O98	1.0	0.66282	0.96597	0.69109	1.0000
O	O99	1.0	0.48218	0.00900	0.64538	1.0000
O	O100	1.0	0.33270	0.63357	0.20080	1.0000
O	O101	1.0	0.17380	0.66973	0.26440	1.0000
O	O102	1.0	0.16221	0.74702	0.17044	1.0000

O	O103	1.0	0.51437	0.68737	0.24632	1.0000
O	O104	1.0	0.47185	0.76617	0.15517	1.0000
O	O105	1.0	0.51631	0.55955	0.16937	1.0000
O	O106	1.0	0.33665	0.28819	0.19106	1.0000
O	O107	1.0	0.16566	0.15927	0.19764	1.0000
O	O108	1.0	0.15559	0.34023	0.14539	1.0000
O	O109	1.0	0.50662	0.16957	0.19792	1.0000
O	O110	1.0	0.52101	0.35202	0.14923	1.0000
O	O111	1.0	0.33728	0.03557	0.19057	1.0000
O	O112	1.0	0.51812	0.99184	0.14472	1.0000
O	O113	1.0	0.01653	0.82079	0.99013	1.0000
O	O114	1.0	0.01182	0.48304	0.00277	1.0000
O	O115	1.0	0.98456	0.17843	0.48960	1.0000
O	O116	1.0	0.98964	0.51830	0.50343	1.0000
O	O117	1.0	0.17487	0.97867	0.25202	1.0000
O	O118	1.0	0.50831	0.98650	0.24493	1.0000
O	O119	1.0	0.82621	0.02119	0.75203	1.0000
O	O120	1.0	0.49101	0.01400	0.74570	1.0000
O	O121	1.0	0.85846	0.46190	0.69031	1.0000
O	O122	1.0	0.47073	0.85784	0.05829	1.0000
O	O123	1.0	0.14055	0.53828	0.19069	1.0000
O	O124	1.0	0.84295	0.96684	0.85961	1.0000
O	O125	1.0	0.15034	0.97373	0.15216	1.0000
O	O126	1.0	0.84966	0.02673	0.65189	1.0000
O	O127	1.0	0.82054	0.17464	0.83258	1.0000
O	O128	1.0	0.17948	0.82596	0.33273	1.0000
Al	Al1	1.0	0.46267	0.13354	0.62132	1.0000
Al	Al2	1.0	0.86677	0.52937	0.62663	1.0000
Al	Al3	1.0	0.53757	0.86613	0.12180	1.0000
Al	Al4	1.0	0.13364	0.47030	0.12696	1.0000
Al	Al5	1.0	0.15611	0.83751	0.12155	1.0000
Al	Al6	1.0	0.84392	0.16237	0.62080	1.0000
Al	Al7	1.0	0.77846	0.03495	0.81293	1.0000
Al	Al8	1.0	0.22201	0.96539	0.31293	1.0000

Si	Si1	1.0	0.33635	0.54350	0.05944	1.0000
Si	Si2	1.0	0.72272	0.79399	0.05555	1.0000
Si	Si3	1.0	0.71046	0.53592	0.05306	1.0000
Si	Si4	1.0	0.96619	0.78930	0.04539	1.0000
Si	Si5	1.0	0.95378	0.53063	0.05322	1.0000
Si	Si6	1.0	0.64786	0.20488	0.54451	1.0000
Si	Si7	1.0	0.66382	0.45602	0.55949	1.0000
Si	Si8	1.0	0.27818	0.20539	0.55512	1.0000
Si	Si9	1.0	0.29076	0.46353	0.55346	1.0000
Si	Si10	1.0	0.03472	0.21038	0.54480	1.0000
Si	Si11	1.0	0.04749	0.46905	0.55340	1.0000
Si	Si12	1.0	0.20832	0.34961	0.30385	1.0000
Si	Si13	1.0	0.45797	0.35165	0.30615	1.0000
Si	Si14	1.0	0.48639	0.72547	0.30286	1.0000
Si	Si15	1.0	0.48319	0.96139	0.30386	1.0000
Si	Si16	1.0	0.15025	0.51590	0.38118	1.0000
Si	Si17	1.0	0.79365	0.65133	0.80368	1.0000
Si	Si18	1.0	0.54398	0.65060	0.80686	1.0000
Si	Si19	1.0	0.51388	0.27491	0.80283	1.0000
Si	Si20	1.0	0.51707	0.03948	0.80454	1.0000
Si	Si21	1.0	0.85107	0.48487	0.88049	1.0000
Si	Si22	1.0	0.65085	0.79491	0.94514	1.0000
Si	Si23	1.0	0.65268	0.54573	0.94319	1.0000
Si	Si24	1.0	0.28760	0.76959	0.93493	1.0000
Si	Si25	1.0	0.28091	0.51383	0.94865	1.0000
Si	Si26	1.0	0.04735	0.77183	0.93557	1.0000
Si	Si27	1.0	0.04425	0.51455	0.94560	1.0000
Si	Si28	1.0	0.48021	0.84860	0.86990	1.0000
Si	Si29	1.0	0.35050	0.20549	0.44470	1.0000
Si	Si30	1.0	0.34866	0.45490	0.44357	1.0000
Si	Si31	1.0	0.71349	0.23111	0.43437	1.0000
Si	Si32	1.0	0.71946	0.48683	0.44874	1.0000
Si	Si33	1.0	0.95362	0.22906	0.43551	1.0000
Si	Si34	1.0	0.95650	0.48641	0.44641	1.0000

Si	Si35	1.0	0.52174	0.15308	0.36894	1.0000
Si	Si36	1.0	0.53989	0.33452	0.69112	1.0000
Si	Si37	1.0	0.79274	0.71657	0.69229	1.0000
Si	Si38	1.0	0.53467	0.71034	0.69667	1.0000
Si	Si39	1.0	0.53134	0.95630	0.69434	1.0000
Si	Si40	1.0	0.45976	0.66496	0.19132	1.0000
Si	Si41	1.0	0.20762	0.28378	0.19273	1.0000
Si	Si42	1.0	0.46589	0.29027	0.19623	1.0000
Si	Si43	1.0	0.46872	0.04468	0.19376	1.0000
Si	Si44	1.0	0.52927	0.47108	0.12528	1.0000
Si	Si45	1.0	0.47089	0.52863	0.62622	1.0000
Si	Si46	1.0	0.15195	0.15737	0.37521	1.0000
Si	Si47	1.0	0.53316	0.53690	0.37540	1.0000
Si	Si48	1.0	0.46821	0.46476	0.87538	1.0000
Si	Si49	1.0	0.79294	0.34479	0.70431	1.0000
Si	Si50	1.0	0.35239	0.79468	0.04506	1.0000
Si	Si51	1.0	0.20663	0.65514	0.20476	1.0000
Si	Si52	1.0	0.84946	0.84378	0.87545	1.0000
Si	Si53	1.0	0.21172	0.03944	0.20195	1.0000
Si	Si54	1.0	0.78849	0.96123	0.70185	1.0000
Si	Si55	1.0	0.76892	0.29437	0.81586	1.0000
Si	Si56	1.0	0.23135	0.70607	0.31623	1.0000

AlSiAl-T1T2T7T7T7T9T9

data_image0
_chemical_formula_structural H8O128Al8Si56
_chemical_formula_sum "H8 O128 Al8 Si56"
_cell_length_a 12.5415
_cell_length_b 12.5208
_cell_length_c 26.5263
_cell_angle_alpha 89.9572
_cell_angle_beta 89.8301
_cell_angle_gamma 91.3952

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47333	0.14445	0.53130	1.0000
H	H2	1.0	0.85905	0.51681	0.71688	1.0000
H	H3	1.0	0.52656	0.85204	0.02947	1.0000
H	H4	1.0	0.14077	0.48572	0.21821	1.0000
H	H5	1.0	0.07999	0.00820	0.14334	1.0000
H	H6	1.0	0.90889	0.98745	0.63767	1.0000
H	H7	1.0	0.87184	0.17559	0.86033	1.0000
H	H8	1.0	0.58412	0.84000	0.34626	1.0000

O	O1	1.0	0.36951	0.66889	0.04863	1.0000
O	O2	1.0	0.32602	0.82822	0.98640	1.0000
O	O3	1.0	0.26904	0.84332	0.08441	1.0000
O	O4	1.0	0.31195	0.48300	0.00618	1.0000
O	O5	1.0	0.23284	0.53853	0.09551	1.0000
O	O6	1.0	0.43777	0.48559	0.08361	1.0000
O	O7	1.0	0.71550	0.66550	0.05920	1.0000
O	O8	1.0	0.84555	0.83537	0.04740	1.0000
O	O9	1.0	0.66786	0.84867	0.10317	1.0000
O	O10	1.0	0.82923	0.49060	0.05221	1.0000
O	O11	1.0	0.64643	0.48301	0.10089	1.0000
O	O12	1.0	0.96171	0.66098	0.05102	1.0000
O	O13	1.0	0.03789	0.84421	0.08945	1.0000
O	O14	1.0	0.00814	0.48767	0.10395	1.0000
O	O15	1.0	0.62657	0.33170	0.54813	1.0000
O	O16	1.0	0.67335	0.17155	0.48662	1.0000
O	O17	1.0	0.73050	0.16004	0.58430	1.0000
O	O18	1.0	0.52973	0.14154	0.55789	1.0000
O	O19	1.0	0.68605	0.51831	0.50611	1.0000
O	O20	1.0	0.76646	0.45972	0.59470	1.0000
O	O21	1.0	0.56234	0.51586	0.58419	1.0000
O	O22	1.0	0.28485	0.33490	0.55991	1.0000
O	O23	1.0	0.15518	0.16466	0.54869	1.0000
O	O24	1.0	0.33267	0.15230	0.60414	1.0000
O	O25	1.0	0.17248	0.51076	0.55250	1.0000
O	O26	1.0	0.35376	0.51722	0.60136	1.0000
O	O27	1.0	0.04082	0.34006	0.55109	1.0000
O	O28	1.0	0.96138	0.15729	0.58905	1.0000
O	O29	1.0	0.99092	0.51380	0.60264	1.0000
O	O30	1.0	0.33739	0.38738	0.30956	1.0000
O	O31	1.0	0.17322	0.35476	0.24530	1.0000
O	O32	1.0	0.18996	0.23642	0.32770	1.0000
O	O33	1.0	0.14174	0.44552	0.33220	1.0000
O	O34	1.0	0.50065	0.34587	0.24903	1.0000

:

O	O35	1.0	0.46497	0.22672	0.33115	1.0000
O	O36	1.0	0.53670	0.42741	0.33881	1.0000
O	O37	1.0	0.35544	0.72750	0.30937	1.0000
O	O38	1.0	0.17974	0.83623	0.32657	1.0000
O	O39	1.0	0.20141	0.64098	0.36317	1.0000
O	O40	1.0	0.53634	0.63870	0.34250	1.0000
O	O41	1.0	0.34272	0.97606	0.31656	1.0000
O	O42	1.0	0.15307	0.03536	0.35160	1.0000
O	O43	1.0	0.55180	0.03836	0.34691	1.0000
O	O44	1.0	0.66890	0.61306	0.81006	1.0000
O	O45	1.0	0.82897	0.64875	0.74412	1.0000
O	O46	1.0	0.81381	0.76997	0.82618	1.0000
O	O47	1.0	0.86623	0.56250	0.83213	1.0000
O	O48	1.0	0.50350	0.64844	0.74948	1.0000
O	O49	1.0	0.53863	0.77067	0.82998	1.0000
O	O50	1.0	0.46904	0.56944	0.83979	1.0000
O	O51	1.0	0.64490	0.27517	0.80962	1.0000
O	O52	1.0	0.79956	0.36971	0.86306	1.0000
O	O53	1.0	0.47002	0.15696	0.81717	1.0000
O	O54	1.0	0.46517	0.35730	0.84284	1.0000
O	O55	1.0	0.64290	0.03287	0.81597	1.0000
O	O56	1.0	0.45217	0.95914	0.84284	1.0000
O	O57	1.0	0.61410	0.66843	0.93920	1.0000
O	O58	1.0	0.65117	0.82809	0.00479	1.0000
O	O59	1.0	0.76921	0.81322	0.92225	1.0000
O	O60	1.0	0.56077	0.86626	0.91810	1.0000
O	O61	1.0	0.64764	0.50517	0.00187	1.0000
O	O62	1.0	0.77460	0.53918	0.92255	1.0000
O	O63	1.0	0.57521	0.46724	0.91075	1.0000
O	O64	1.0	0.28448	0.64206	0.94300	1.0000
O	O65	1.0	0.16784	0.80915	0.92010	1.0000
O	O66	1.0	0.36720	0.79661	0.88882	1.0000
O	O67	1.0	0.16178	0.46944	0.93466	1.0000
O	O68	1.0	0.36230	0.45934	0.91018	1.0000

O	O69	1.0	0.03738	0.64215	0.93743	1.0000
O	O70	1.0	0.96923	0.81444	0.89166	1.0000
O	O71	1.0	0.96466	0.45611	0.90559	1.0000
O	O72	1.0	0.37499	0.33021	0.43819	1.0000
O	O73	1.0	0.34845	0.17163	0.50554	1.0000
O	O74	1.0	0.23528	0.17023	0.42076	1.0000
O	O75	1.0	0.44723	0.13732	0.42113	1.0000
O	O76	1.0	0.35488	0.49381	0.50220	1.0000
O	O77	1.0	0.22528	0.47195	0.42337	1.0000
O	O78	1.0	0.42875	0.52814	0.41082	1.0000
O	O79	1.0	0.72022	0.35803	0.44517	1.0000
O	O80	1.0	0.83543	0.19073	0.42118	1.0000
O	O81	1.0	0.63791	0.20809	0.38875	1.0000
O	O82	1.0	0.84019	0.53165	0.43559	1.0000
O	O83	1.0	0.64163	0.53861	0.40922	1.0000
O	O84	1.0	0.96590	0.35883	0.43561	1.0000
O	O85	1.0	0.03438	0.18312	0.39197	1.0000
O	O86	1.0	0.03466	0.54719	0.40377	1.0000
O	O87	1.0	0.66697	0.36692	0.70090	1.0000
O	O88	1.0	0.82612	0.33091	0.76406	1.0000
O	O89	1.0	0.83646	0.25233	0.67032	1.0000
O	O90	1.0	0.48660	0.30918	0.74645	1.0000
O	O91	1.0	0.52865	0.23573	0.65415	1.0000
O	O92	1.0	0.48275	0.44112	0.67111	1.0000
O	O93	1.0	0.66381	0.71242	0.69143	1.0000
O	O94	1.0	0.83469	0.84060	0.69756	1.0000
O	O95	1.0	0.84345	0.65968	0.64492	1.0000
O	O96	1.0	0.49402	0.83125	0.69870	1.0000
O	O97	1.0	0.47952	0.64813	0.65050	1.0000
O	O98	1.0	0.66314	0.96489	0.69185	1.0000
O	O99	1.0	0.48385	0.00943	0.64573	1.0000
O	O100	1.0	0.33320	0.63530	0.20026	1.0000
O	O101	1.0	0.17543	0.66930	0.26457	1.0000
O	O102	1.0	0.16356	0.74882	0.17044	1.0000

O	O103	1.0	0.51404	0.69161	0.24550	1.0000
O	O104	1.0	0.47318	0.76598	0.15351	1.0000
O	O105	1.0	0.51699	0.55948	0.17049	1.0000
O	O106	1.0	0.33605	0.28811	0.19200	1.0000
O	O107	1.0	0.16368	0.16138	0.20040	1.0000
O	O108	1.0	0.15486	0.34055	0.14647	1.0000
O	O109	1.0	0.50392	0.16611	0.19633	1.0000
O	O110	1.0	0.51939	0.35228	0.14989	1.0000
O	O111	1.0	0.33313	0.03516	0.18904	1.0000
O	O112	1.0	0.51019	0.99385	0.13938	1.0000
O	O113	1.0	0.01674	0.82123	0.99017	1.0000
O	O114	1.0	0.01123	0.48311	0.00355	1.0000
O	O115	1.0	0.98690	0.18096	0.49010	1.0000
O	O116	1.0	0.99322	0.51675	0.50224	1.0000
O	O117	1.0	0.17520	0.98253	0.25461	1.0000
O	O118	1.0	0.50435	0.97658	0.23984	1.0000
O	O119	1.0	0.82653	0.02115	0.75209	1.0000
O	O120	1.0	0.49132	0.01426	0.74610	1.0000
O	O121	1.0	0.85856	0.46155	0.68988	1.0000
O	O122	1.0	0.47037	0.85609	0.05630	1.0000
O	O123	1.0	0.14134	0.53992	0.19071	1.0000
O	O124	1.0	0.84301	0.96677	0.85959	1.0000
O	O125	1.0	0.14449	0.97392	0.15519	1.0000
O	O126	1.0	0.84912	0.02592	0.65201	1.0000
O	O127	1.0	0.82117	0.17438	0.83248	1.0000
O	O128	1.0	0.53207	0.83691	0.31907	1.0000
Al	Al1	1.0	0.46339	0.13411	0.62185	1.0000
Al	Al2	1.0	0.86567	0.52973	0.62618	1.0000
Al	Al3	1.0	0.53611	0.86723	0.11962	1.0000
Al	Al4	1.0	0.13299	0.47061	0.12761	1.0000
Al	Al5	1.0	0.15637	0.83975	0.12178	1.0000
Al	Al6	1.0	0.84281	0.16195	0.62136	1.0000
Al	Al7	1.0	0.77857	0.03505	0.81292	1.0000
Al	Al8	1.0	0.47658	0.97009	0.30279	1.0000

Si	Si1	1.0	0.33549	0.54386	0.05959	1.0000
Si	Si2	1.0	0.72311	0.79489	0.05569	1.0000
Si	Si3	1.0	0.71033	0.53674	0.05402	1.0000
Si	Si4	1.0	0.96674	0.79010	0.04561	1.0000
Si	Si5	1.0	0.95363	0.53126	0.05398	1.0000
Si	Si6	1.0	0.64808	0.20473	0.54478	1.0000
Si	Si7	1.0	0.66293	0.45610	0.55945	1.0000
Si	Si8	1.0	0.27742	0.20554	0.55664	1.0000
Si	Si9	1.0	0.29086	0.46356	0.55443	1.0000
Si	Si10	1.0	0.03471	0.21105	0.54583	1.0000
Si	Si11	1.0	0.04816	0.46977	0.55332	1.0000
Si	Si12	1.0	0.21113	0.35461	0.30462	1.0000
Si	Si13	1.0	0.46029	0.34558	0.30705	1.0000
Si	Si14	1.0	0.22643	0.71914	0.31603	1.0000
Si	Si15	1.0	0.21648	0.95900	0.31260	1.0000
Si	Si16	1.0	0.15130	0.52630	0.38056	1.0000
Si	Si17	1.0	0.79386	0.65099	0.80389	1.0000
Si	Si18	1.0	0.54442	0.65058	0.80729	1.0000
Si	Si19	1.0	0.51486	0.27506	0.80341	1.0000
Si	Si20	1.0	0.51758	0.03954	0.80491	1.0000
Si	Si21	1.0	0.85126	0.48429	0.88108	1.0000
Si	Si22	1.0	0.65065	0.79422	0.94506	1.0000
Si	Si23	1.0	0.65242	0.54497	0.94390	1.0000
Si	Si24	1.0	0.28614	0.76952	0.93458	1.0000
Si	Si25	1.0	0.28079	0.51366	0.94890	1.0000
Si	Si26	1.0	0.04677	0.77169	0.93559	1.0000
Si	Si27	1.0	0.04402	0.51438	0.94636	1.0000
Si	Si28	1.0	0.47969	0.84832	0.87019	1.0000
Si	Si29	1.0	0.34961	0.20261	0.44546	1.0000
Si	Si30	1.0	0.34583	0.45579	0.44409	1.0000
Si	Si31	1.0	0.71703	0.23103	0.43540	1.0000
Si	Si32	1.0	0.72161	0.48644	0.44951	1.0000
Si	Si33	1.0	0.95669	0.22916	0.43546	1.0000
Si	Si34	1.0	0.95883	0.48676	0.44526	1.0000

Si	Si35	1.0	0.52636	0.15097	0.37192	1.0000
Si	Si36	1.0	0.54034	0.33494	0.69155	1.0000
Si	Si37	1.0	0.79258	0.71623	0.69265	1.0000
Si	Si38	1.0	0.53490	0.71044	0.69714	1.0000
Si	Si39	1.0	0.53184	0.95624	0.69486	1.0000
Si	Si40	1.0	0.45930	0.66614	0.19023	1.0000
Si	Si41	1.0	0.20730	0.28557	0.19411	1.0000
Si	Si42	1.0	0.46530	0.28749	0.19636	1.0000
Si	Si43	1.0	0.46581	0.04099	0.19093	1.0000
Si	Si44	1.0	0.52882	0.47145	0.12602	1.0000
Si	Si45	1.0	0.47075	0.52889	0.62666	1.0000
Si	Si46	1.0	0.15353	0.15604	0.37346	1.0000
Si	Si47	1.0	0.53509	0.52997	0.37596	1.0000
Si	Si48	1.0	0.46829	0.46462	0.87603	1.0000
Si	Si49	1.0	0.79282	0.34496	0.70453	1.0000
Si	Si50	1.0	0.35033	0.79606	0.04466	1.0000
Si	Si51	1.0	0.20689	0.65675	0.20526	1.0000
Si	Si52	1.0	0.84910	0.84344	0.87519	1.0000
Si	Si53	1.0	0.21002	0.04174	0.20290	1.0000
Si	Si54	1.0	0.78872	0.96053	0.70222	1.0000
Si	Si55	1.0	0.76952	0.29450	0.81619	1.0000
Si	Si56	1.0	0.48133	0.71529	0.30257	1.0000

AlSiAl-T1T7T7T7T7T9T9T9

data_image0

_chemical_formula_structural H₈O₁₂Al₈Si₅6

_chemical_formula_sum "H₈ O₁₂ Al₈ Si₅6"

_cell_length_a 12.5573

_cell_length_b 12.5215

_cell_length_c 26.5356

_cell_angle_alpha 90.0583

_cell_angle_beta 89.9419

_cell_angle_gamma 91.3805

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H	H1	1.0	0.47211	0.14530	0.53333	1.0000
H	H2	1.0	0.86099	0.51571	0.71706	1.0000
H	H3	1.0	0.52669	0.85550	0.03146	1.0000
H	H4	1.0	0.14287	0.47965	0.21532	1.0000
H	H5	1.0	0.08228	0.00640	0.14142	1.0000
H	H6	1.0	0.90943	0.98806	0.63816	1.0000
H	H7	1.0	0.87197	0.17618	0.86012	1.0000
H	H8	1.0	0.09283	0.98271	0.36746	1.0000

O	O1	1.0	0.37384	0.66939	0.04884	1.0000
O	O2	1.0	0.32854	0.82898	0.98721	1.0000
O	O3	1.0	0.26910	0.84126	0.08483	1.0000
O	O4	1.0	0.31589	0.48372	0.00554	1.0000
O	O5	1.0	0.23253	0.54105	0.09347	1.0000
O	O6	1.0	0.43724	0.48486	0.08445	1.0000
O	O7	1.0	0.71611	0.66399	0.05827	1.0000
O	O8	1.0	0.84574	0.83395	0.04780	1.0000
O	O9	1.0	0.66879	0.84507	0.10386	1.0000
O	O10	1.0	0.82919	0.48873	0.05237	1.0000
O	O11	1.0	0.64635	0.48289	0.10063	1.0000
O	O12	1.0	0.96156	0.65932	0.05179	1.0000
O	O13	1.0	0.03760	0.84249	0.09021	1.0000
O	O14	1.0	0.00930	0.48345	0.10255	1.0000
O	O15	1.0	0.62573	0.33118	0.54974	1.0000
O	O16	1.0	0.66085	0.17287	0.48582	1.0000
O	O17	1.0	0.73447	0.15930	0.58146	1.0000
O	O18	1.0	0.52945	0.14088	0.55987	1.0000
O	O19	1.0	0.68811	0.51414	0.50559	1.0000
O	O20	1.0	0.76488	0.46091	0.59547	1.0000
O	O21	1.0	0.56166	0.51773	0.58271	1.0000
O	O22	1.0	0.28534	0.33786	0.55850	1.0000
O	O23	1.0	0.15861	0.16513	0.54818	1.0000
O	O24	1.0	0.33350	0.15827	0.60564	1.0000
O	O25	1.0	0.17019	0.51156	0.55208	1.0000
O	O26	1.0	0.35307	0.52001	0.60022	1.0000
O	O27	1.0	0.04160	0.33798	0.55082	1.0000
O	O28	1.0	0.96566	0.15617	0.59037	1.0000
O	O29	1.0	0.99011	0.51140	0.60255	1.0000
O	O30	1.0	0.33649	0.39394	0.30620	1.0000
O	O31	1.0	0.17425	0.35825	0.24131	1.0000
O	O32	1.0	0.19540	0.23213	0.32036	1.0000
O	O33	1.0	0.13928	0.43938	0.33045	1.0000
O	O34	1.0	0.50266	0.34914	0.24842	1.0000

O	O35	1.0	0.46284	0.23543	0.33121	1.0000
O	O36	1.0	0.53545	0.43604	0.33734	1.0000
O	O37	1.0	0.35190	0.71530	0.30901	1.0000
O	O38	1.0	0.18025	0.82910	0.32318	1.0000
O	O39	1.0	0.19322	0.63588	0.36284	1.0000
O	O40	1.0	0.51635	0.84432	0.31749	1.0000
O	O41	1.0	0.53770	0.64722	0.34330	1.0000
O	O42	1.0	0.34484	0.97273	0.31776	1.0000
O	O43	1.0	0.53729	0.04291	0.34170	1.0000
O	O44	1.0	0.66941	0.61462	0.81040	1.0000
O	O45	1.0	0.82899	0.65017	0.74433	1.0000
O	O46	1.0	0.81481	0.77037	0.82697	1.0000
O	O47	1.0	0.86653	0.56301	0.83183	1.0000
O	O48	1.0	0.50492	0.64832	0.74920	1.0000
O	O49	1.0	0.53736	0.77102	0.83002	1.0000
O	O50	1.0	0.46969	0.56938	0.83915	1.0000
O	O51	1.0	0.64536	0.27552	0.80915	1.0000
O	O52	1.0	0.80046	0.36993	0.86226	1.0000
O	O53	1.0	0.47050	0.15787	0.81592	1.0000
O	O54	1.0	0.46580	0.35665	0.84337	1.0000
O	O55	1.0	0.64326	0.03348	0.81658	1.0000
O	O56	1.0	0.45296	0.96056	0.84355	1.0000
O	O57	1.0	0.61640	0.66877	0.93955	1.0000
O	O58	1.0	0.65115	0.82862	0.00531	1.0000
O	O59	1.0	0.76983	0.81523	0.92285	1.0000
O	O60	1.0	0.56119	0.86612	0.91832	1.0000
O	O61	1.0	0.64846	0.50354	0.00137	1.0000
O	O62	1.0	0.77552	0.53833	0.92226	1.0000
O	O63	1.0	0.57535	0.46843	0.91047	1.0000
O	O64	1.0	0.28420	0.64343	0.94372	1.0000
O	O65	1.0	0.16857	0.81098	0.92149	1.0000
O	O66	1.0	0.36727	0.79799	0.88943	1.0000
O	O67	1.0	0.16270	0.46990	0.93514	1.0000
O	O68	1.0	0.36214	0.46166	0.90926	1.0000

O	O69	1.0	0.03889	0.64272	0.93699	1.0000
O	O70	1.0	0.96980	0.81617	0.89265	1.0000
O	O71	1.0	0.96613	0.45676	0.90449	1.0000
O	O72	1.0	0.38610	0.33335	0.44035	1.0000
O	O73	1.0	0.35537	0.17379	0.50723	1.0000
O	O74	1.0	0.23787	0.17894	0.42420	1.0000
O	O75	1.0	0.44596	0.13779	0.42008	1.0000
O	O76	1.0	0.35117	0.49917	0.50101	1.0000
O	O77	1.0	0.22791	0.46418	0.42069	1.0000
O	O78	1.0	0.42775	0.53260	0.41003	1.0000
O	O79	1.0	0.71014	0.35603	0.44120	1.0000
O	O80	1.0	0.82861	0.18502	0.42531	1.0000
O	O81	1.0	0.63818	0.19815	0.38619	1.0000
O	O82	1.0	0.83892	0.52454	0.43424	1.0000
O	O83	1.0	0.64021	0.54241	0.40963	1.0000
O	O84	1.0	0.96218	0.35081	0.43736	1.0000
O	O85	1.0	0.02216	0.17175	0.39159	1.0000
O	O86	1.0	0.03398	0.53643	0.40405	1.0000
O	O87	1.0	0.66733	0.36993	0.70104	1.0000
O	O88	1.0	0.82652	0.32954	0.76328	1.0000
O	O89	1.0	0.83417	0.25257	0.66905	1.0000
O	O90	1.0	0.48690	0.31415	0.74662	1.0000
O	O91	1.0	0.53210	0.23293	0.65630	1.0000
O	O92	1.0	0.48253	0.43925	0.66875	1.0000
O	O93	1.0	0.66447	0.71150	0.69074	1.0000
O	O94	1.0	0.83382	0.84130	0.69730	1.0000
O	O95	1.0	0.84542	0.65983	0.64525	1.0000
O	O96	1.0	0.49485	0.83042	0.69845	1.0000
O	O97	1.0	0.47962	0.64741	0.65038	1.0000
O	O98	1.0	0.66230	0.96575	0.69101	1.0000
O	O99	1.0	0.48022	0.00882	0.64640	1.0000
O	O100	1.0	0.33272	0.63102	0.19966	1.0000
O	O101	1.0	0.17202	0.66086	0.26331	1.0000
O	O102	1.0	0.16396	0.74673	0.17098	1.0000

O	O103	1.0	0.51224	0.69123	0.24636	1.0000
O	O104	1.0	0.47194	0.76226	0.15392	1.0000
O	O105	1.0	0.51812	0.55717	0.17144	1.0000
O	O106	1.0	0.33866	0.28459	0.19170	1.0000
O	O107	1.0	0.16449	0.16171	0.19834	1.0000
O	O108	1.0	0.16194	0.33840	0.14237	1.0000
O	O109	1.0	0.50719	0.16684	0.19758	1.0000
O	O110	1.0	0.52108	0.35056	0.14921	1.0000
O	O111	1.0	0.33492	0.03635	0.18689	1.0000
O	O112	1.0	0.51945	0.98756	0.14624	1.0000
O	O113	1.0	0.01730	0.81976	0.99110	1.0000
O	O114	1.0	0.00960	0.48310	0.00243	1.0000
O	O115	1.0	0.98659	0.17473	0.49125	1.0000
O	O116	1.0	0.98980	0.51296	0.50220	1.0000
O	O117	1.0	0.18175	0.98378	0.25336	1.0000
O	O118	1.0	0.49288	0.98468	0.24610	1.0000
O	O119	1.0	0.82523	0.02124	0.75187	1.0000
O	O120	1.0	0.49194	0.01217	0.74658	1.0000
O	O121	1.0	0.85978	0.46110	0.68985	1.0000
O	O122	1.0	0.47076	0.85867	0.05838	1.0000
O	O123	1.0	0.14146	0.53577	0.18830	1.0000
O	O124	1.0	0.84365	0.96757	0.85968	1.0000
O	O125	1.0	0.14545	0.97210	0.15479	1.0000
O	O126	1.0	0.84862	0.02614	0.65168	1.0000
O	O127	1.0	0.82174	0.17455	0.83209	1.0000
O	O128	1.0	0.15243	0.02214	0.35191	1.0000
Al	Al1	1.0	0.46323	0.13471	0.62318	1.0000
Al	Al2	1.0	0.86576	0.52964	0.62623	1.0000
Al	Al3	1.0	0.53821	0.86295	0.12168	1.0000
Al	Al4	1.0	0.13524	0.46873	0.12510	1.0000
Al	Al5	1.0	0.15655	0.83581	0.12182	1.0000
Al	Al6	1.0	0.84438	0.16183	0.62025	1.0000
Al	Al7	1.0	0.77872	0.03512	0.81285	1.0000
Al	Al8	1.0	0.15292	0.16660	0.37414	1.0000

Si	Si1	1.0	0.33747	0.54464	0.05913	1.0000
Si	Si2	1.0	0.72341	0.79330	0.05569	1.0000
Si	Si3	1.0	0.71054	0.53519	0.05365	1.0000
Si	Si4	1.0	0.96660	0.78835	0.04615	1.0000
Si	Si5	1.0	0.95341	0.52944	0.05345	1.0000
Si	Si6	1.0	0.64606	0.20423	0.54496	1.0000
Si	Si7	1.0	0.66263	0.45591	0.55943	1.0000
Si	Si8	1.0	0.27992	0.20833	0.55688	1.0000
Si	Si9	1.0	0.28940	0.46654	0.55334	1.0000
Si	Si10	1.0	0.03688	0.20870	0.54596	1.0000
Si	Si11	1.0	0.04689	0.46768	0.55309	1.0000
Si	Si12	1.0	0.21202	0.35271	0.30120	1.0000
Si	Si13	1.0	0.45957	0.35361	0.30608	1.0000
Si	Si14	1.0	0.22489	0.70776	0.31481	1.0000
Si	Si15	1.0	0.48047	0.72274	0.30339	1.0000
Si	Si16	1.0	0.47335	0.96176	0.30514	1.0000
Si	Si17	1.0	0.14938	0.51774	0.37967	1.0000
Si	Si18	1.0	0.79424	0.65202	0.80397	1.0000
Si	Si19	1.0	0.54485	0.65111	0.80710	1.0000
Si	Si20	1.0	0.51543	0.27628	0.80298	1.0000
Si	Si21	1.0	0.51818	0.03987	0.80506	1.0000
Si	Si22	1.0	0.85204	0.48436	0.88047	1.0000
Si	Si23	1.0	0.65145	0.79491	0.94538	1.0000
Si	Si24	1.0	0.65364	0.54491	0.94364	1.0000
Si	Si25	1.0	0.28699	0.77088	0.93534	1.0000
Si	Si26	1.0	0.28174	0.51480	0.94869	1.0000
Si	Si27	1.0	0.04760	0.77230	0.93614	1.0000
Si	Si28	1.0	0.04464	0.51485	0.94570	1.0000
Si	Si29	1.0	0.47972	0.84908	0.87043	1.0000
Si	Si30	1.0	0.35263	0.20654	0.44703	1.0000
Si	Si31	1.0	0.34835	0.45699	0.44335	1.0000
Si	Si32	1.0	0.71034	0.22810	0.43499	1.0000
Si	Si33	1.0	0.71904	0.48406	0.44820	1.0000
Si	Si34	1.0	0.95214	0.22061	0.43641	1.0000

Si	Si35	1.0	0.95640	0.47883	0.44548	1.0000
Si	Si36	1.0	0.52077	0.15547	0.37046	1.0000
Si	Si37	1.0	0.54130	0.33602	0.69148	1.0000
Si	Si38	1.0	0.79308	0.71651	0.69252	1.0000
Si	Si39	1.0	0.53583	0.70977	0.69673	1.0000
Si	Si40	1.0	0.53122	0.95567	0.69479	1.0000
Si	Si41	1.0	0.45926	0.66329	0.19153	1.0000
Si	Si42	1.0	0.21007	0.28594	0.19164	1.0000
Si	Si43	1.0	0.46770	0.28861	0.19651	1.0000
Si	Si44	1.0	0.46609	0.04354	0.19311	1.0000
Si	Si45	1.0	0.52958	0.47082	0.12625	1.0000
Si	Si46	1.0	0.47039	0.52928	0.62534	1.0000
Si	Si47	1.0	0.53468	0.53803	0.37549	1.0000
Si	Si48	1.0	0.46863	0.46524	0.87564	1.0000
Si	Si49	1.0	0.79263	0.34512	0.70386	1.0000
Si	Si50	1.0	0.35217	0.79611	0.04539	1.0000
Si	Si51	1.0	0.20650	0.65138	0.20418	1.0000
Si	Si52	1.0	0.84977	0.84457	0.87575	1.0000
Si	Si53	1.0	0.21181	0.04329	0.20055	1.0000
Si	Si54	1.0	0.78770	0.96124	0.70170	1.0000
Si	Si55	1.0	0.77003	0.29435	0.81545	1.0000
Si	Si56	1.0	0.22029	0.94873	0.30920	1.0000

AlSiAl-T2T7T7T7T7T9T9T9

data_image0
_chemical_formula_structural H8O128Al8Si56
_chemical_formula_sum "H8 O128 Al8 Si56"
_cell_length_a 12.5727
_cell_length_b 12.5075
_cell_length_c 26.5415
_cell_angle_alpha 89.4286
_cell_angle_beta 89.9952
_cell_angle_gamma 91.2207

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.47117	0.14888	0.53438	1.0000
H	H2	1.0	0.86253	0.51477	0.71723	1.0000
H	H3	1.0	0.52452	0.85384	0.02848	1.0000
H	H4	1.0	0.14414	0.48167	0.21563	1.0000
H	H5	1.0	0.08039	0.01013	0.13961	1.0000
H	H6	1.0	0.91629	0.99295	0.64420	1.0000
H	H7	1.0	0.57565	0.83939	0.34803	1.0000
H	H8	1.0	0.07507	0.98914	0.36094	1.0000

O	O1	1.0	0.37194	0.67127	0.04734	1.0000
O	O2	1.0	0.32400	0.83068	0.98494	1.0000
O	O3	1.0	0.26760	0.84340	0.08296	1.0000
O	O4	1.0	0.31516	0.48504	0.00606	1.0000
O	O5	1.0	0.23232	0.54393	0.09368	1.0000
O	O6	1.0	0.43680	0.48754	0.08510	1.0000
O	O7	1.0	0.71505	0.66244	0.05942	1.0000
O	O8	1.0	0.84335	0.83362	0.04684	1.0000
O	O9	1.0	0.66582	0.84647	0.10178	1.0000
O	O10	1.0	0.82906	0.48811	0.05342	1.0000
O	O11	1.0	0.64569	0.48065	0.10146	1.0000
O	O12	1.0	0.95987	0.66005	0.05186	1.0000
O	O13	1.0	0.03631	0.84374	0.08866	1.0000
O	O14	1.0	0.00948	0.48450	0.10323	1.0000
O	O15	1.0	0.62761	0.33347	0.55053	1.0000
O	O16	1.0	0.66582	0.17341	0.48848	1.0000
O	O17	1.0	0.73168	0.15890	0.58503	1.0000
O	O18	1.0	0.52865	0.14462	0.56090	1.0000
O	O19	1.0	0.68677	0.51868	0.50554	1.0000
O	O20	1.0	0.76568	0.46404	0.59513	1.0000
O	O21	1.0	0.56192	0.51998	0.58279	1.0000
O	O22	1.0	0.28505	0.33771	0.56096	1.0000
O	O23	1.0	0.15659	0.16665	0.55113	1.0000
O	O24	1.0	0.33241	0.15698	0.60793	1.0000
O	O25	1.0	0.17058	0.51204	0.55285	1.0000
O	O26	1.0	0.35367	0.52171	0.60026	1.0000
O	O27	1.0	0.03951	0.34029	0.55310	1.0000
O	O28	1.0	0.96317	0.15655	0.59184	1.0000
O	O29	1.0	0.98961	0.51666	0.60197	1.0000
O	O30	1.0	0.33771	0.39150	0.30684	1.0000
O	O31	1.0	0.17388	0.35937	0.24204	1.0000
O	O32	1.0	0.19425	0.23343	0.32192	1.0000
O	O33	1.0	0.14131	0.44187	0.33054	1.0000
O	O34	1.0	0.50380	0.34109	0.25056	1.0000

O	O35	1.0	0.46065	0.22873	0.33446	1.0000
O	O36	1.0	0.53586	0.42838	0.33884	1.0000
O	O37	1.0	0.35187	0.72771	0.30802	1.0000
O	O38	1.0	0.17440	0.83023	0.32289	1.0000
O	O39	1.0	0.19903	0.63645	0.36218	1.0000
O	O40	1.0	0.53289	0.63942	0.34236	1.0000
O	O41	1.0	0.33596	0.97783	0.31870	1.0000
O	O42	1.0	0.54551	0.03909	0.34784	1.0000
O	O43	1.0	0.66659	0.61204	0.81052	1.0000
O	O44	1.0	0.82730	0.64448	0.74463	1.0000
O	O45	1.0	0.81468	0.76350	0.82614	1.0000
O	O46	1.0	0.86249	0.55438	0.83214	1.0000
O	O47	1.0	0.50297	0.64515	0.74895	1.0000
O	O48	1.0	0.53318	0.76819	0.82896	1.0000
O	O49	1.0	0.46802	0.56632	0.83980	1.0000
O	O50	1.0	0.64621	0.28624	0.81045	1.0000
O	O51	1.0	0.81371	0.16336	0.82649	1.0000
O	O52	1.0	0.80715	0.35707	0.86367	1.0000
O	O53	1.0	0.47997	0.15762	0.81667	1.0000
O	O54	1.0	0.46084	0.35371	0.84433	1.0000
O	O55	1.0	0.64973	0.02694	0.81472	1.0000
O	O56	1.0	0.45850	0.96059	0.84307	1.0000
O	O57	1.0	0.61941	0.66305	0.93786	1.0000
O	O58	1.0	0.64967	0.82355	0.00378	1.0000
O	O59	1.0	0.76545	0.81641	0.92050	1.0000
O	O60	1.0	0.55592	0.85872	0.91812	1.0000
O	O61	1.0	0.64798	0.50159	0.00241	1.0000
O	O62	1.0	0.77402	0.52656	0.92231	1.0000
O	O63	1.0	0.57204	0.46302	0.91194	1.0000
O	O64	1.0	0.28477	0.64438	0.94234	1.0000
O	O65	1.0	0.16399	0.81020	0.91961	1.0000
O	O66	1.0	0.36106	0.80107	0.88678	1.0000
O	O67	1.0	0.16125	0.47327	0.93613	1.0000
O	O68	1.0	0.35961	0.45979	0.91017	1.0000

O	O69	1.0	0.03231	0.64372	0.93530	1.0000
O	O70	1.0	0.96577	0.82221	0.89159	1.0000
O	O71	1.0	0.96723	0.45433	0.90521	1.0000
O	O72	1.0	0.38075	0.32940	0.44108	1.0000
O	O73	1.0	0.35237	0.17270	0.50953	1.0000
O	O74	1.0	0.24063	0.16820	0.42431	1.0000
O	O75	1.0	0.45116	0.13612	0.42508	1.0000
O	O76	1.0	0.35086	0.49654	0.50154	1.0000
O	O77	1.0	0.22644	0.46504	0.42160	1.0000
O	O78	1.0	0.42822	0.52756	0.41096	1.0000
O	O79	1.0	0.71603	0.35800	0.44486	1.0000
O	O80	1.0	0.83036	0.18668	0.42625	1.0000
O	O81	1.0	0.63792	0.20518	0.38927	1.0000
O	O82	1.0	0.83988	0.52949	0.43472	1.0000
O	O83	1.0	0.64108	0.54056	0.40877	1.0000
O	O84	1.0	0.96212	0.35450	0.43709	1.0000
O	O85	1.0	0.02368	0.17475	0.39347	1.0000
O	O86	1.0	0.03470	0.54048	0.40300	1.0000
O	O87	1.0	0.66779	0.37016	0.70099	1.0000
O	O88	1.0	0.82723	0.33148	0.76452	1.0000
O	O89	1.0	0.83447	0.25268	0.67105	1.0000
O	O90	1.0	0.48684	0.31546	0.74740	1.0000
O	O91	1.0	0.53102	0.23370	0.65768	1.0000
O	O92	1.0	0.48314	0.44068	0.66903	1.0000
O	O93	1.0	0.66377	0.71263	0.69170	1.0000
O	O94	1.0	0.83495	0.83875	0.70030	1.0000
O	O95	1.0	0.84398	0.66145	0.64561	1.0000
O	O96	1.0	0.49472	0.83050	0.69976	1.0000
O	O97	1.0	0.48016	0.64947	0.64997	1.0000
O	O98	1.0	0.66395	0.96427	0.69168	1.0000
O	O99	1.0	0.48327	0.00887	0.64615	1.0000
O	O100	1.0	0.33329	0.63376	0.19921	1.0000
O	O101	1.0	0.17463	0.66291	0.26284	1.0000
O	O102	1.0	0.16398	0.74972	0.17003	1.0000

O	O103	1.0	0.51176	0.69424	0.24513	1.0000
O	O104	1.0	0.47140	0.76546	0.15221	1.0000
O	O105	1.0	0.51901	0.55993	0.17122	1.0000
O	O106	1.0	0.33793	0.28404	0.19446	1.0000
O	O107	1.0	0.16254	0.16277	0.19868	1.0000
O	O108	1.0	0.16390	0.34082	0.14317	1.0000
O	O109	1.0	0.50559	0.16374	0.19652	1.0000
O	O110	1.0	0.51833	0.35236	0.15130	1.0000
O	O111	1.0	0.33190	0.03677	0.18601	1.0000
O	O112	1.0	0.51193	0.99207	0.14029	1.0000
O	O113	1.0	0.01413	0.82005	0.98979	1.0000
O	O114	1.0	0.00873	0.48521	0.00301	1.0000
O	O115	1.0	0.98672	0.17930	0.49293	1.0000
O	O116	1.0	0.99279	0.51517	0.50154	1.0000
O	O117	1.0	0.17550	0.98122	0.25157	1.0000
O	O118	1.0	0.49447	0.97442	0.24090	1.0000
O	O119	1.0	0.82048	0.01476	0.75600	1.0000
O	O120	1.0	0.49634	0.01393	0.74629	1.0000
O	O121	1.0	0.86025	0.46119	0.68979	1.0000
O	O122	1.0	0.46850	0.85959	0.05507	1.0000
O	O123	1.0	0.14225	0.53827	0.18848	1.0000
O	O124	1.0	0.83331	0.96355	0.85372	1.0000
O	O125	1.0	0.14349	0.97508	0.15280	1.0000
O	O126	1.0	0.85241	0.02755	0.65653	1.0000
O	O127	1.0	0.52609	0.83773	0.31980	1.0000
O	O128	1.0	0.14136	0.02356	0.34958	1.0000
Al	Al1	1.0	0.46335	0.13629	0.62426	1.0000
Al	Al2	1.0	0.86570	0.53143	0.62656	1.0000
Al	Al3	1.0	0.53514	0.86672	0.11847	1.0000
Al	Al4	1.0	0.13566	0.47087	0.12553	1.0000
Al	Al5	1.0	0.15545	0.83926	0.12034	1.0000
Al	Al6	1.0	0.84324	0.16309	0.62257	1.0000
Al	Al7	1.0	0.47073	0.97174	0.30409	1.0000
Al	Al8	1.0	0.15314	0.16381	0.37498	1.0000

Si	Si1	1.0	0.33674	0.54656	0.05912	1.0000
Si	Si2	1.0	0.72159	0.79178	0.05498	1.0000
Si	Si3	1.0	0.71006	0.53354	0.05445	1.0000
Si	Si4	1.0	0.96465	0.78906	0.04530	1.0000
Si	Si5	1.0	0.95269	0.53002	0.05398	1.0000
Si	Si6	1.0	0.64659	0.20590	0.54692	1.0000
Si	Si7	1.0	0.66300	0.45870	0.55958	1.0000
Si	Si8	1.0	0.27833	0.20805	0.55918	1.0000
Si	Si9	1.0	0.28942	0.46631	0.55435	1.0000
Si	Si10	1.0	0.03526	0.21099	0.54798	1.0000
Si	Si11	1.0	0.04691	0.47019	0.55350	1.0000
Si	Si12	1.0	0.21234	0.35325	0.30186	1.0000
Si	Si13	1.0	0.45912	0.34609	0.30783	1.0000
Si	Si14	1.0	0.22392	0.71217	0.31421	1.0000
Si	Si15	1.0	0.15059	0.51969	0.37942	1.0000
Si	Si16	1.0	0.79209	0.64458	0.80427	1.0000
Si	Si17	1.0	0.54219	0.64775	0.80704	1.0000
Si	Si18	1.0	0.77342	0.28431	0.81625	1.0000
Si	Si19	1.0	0.51829	0.27923	0.80395	1.0000
Si	Si20	1.0	0.52237	0.03971	0.80453	1.0000
Si	Si21	1.0	0.85174	0.47317	0.88082	1.0000
Si	Si22	1.0	0.64923	0.78957	0.94432	1.0000
Si	Si23	1.0	0.65349	0.53793	0.94376	1.0000
Si	Si24	1.0	0.28302	0.77185	0.93351	1.0000
Si	Si25	1.0	0.28058	0.51568	0.94903	1.0000
Si	Si26	1.0	0.04311	0.77332	0.93483	1.0000
Si	Si27	1.0	0.04227	0.51583	0.94583	1.0000
Si	Si28	1.0	0.47680	0.84588	0.86946	1.0000
Si	Si29	1.0	0.35225	0.20134	0.44863	1.0000
Si	Si30	1.0	0.34630	0.45363	0.44427	1.0000
Si	Si31	1.0	0.71285	0.23027	0.43726	1.0000
Si	Si32	1.0	0.72100	0.48637	0.44902	1.0000
Si	Si33	1.0	0.95315	0.22402	0.43749	1.0000
Si	Si34	1.0	0.95780	0.48256	0.44505	1.0000

Si	Si35	1.0	0.52415	0.15127	0.37430	1.0000
Si	Si36	1.0	0.54179	0.33698	0.69234	1.0000
Si	Si37	1.0	0.79218	0.71440	0.69362	1.0000
Si	Si38	1.0	0.53506	0.70918	0.69709	1.0000
Si	Si39	1.0	0.53268	0.95502	0.69485	1.0000
Si	Si40	1.0	0.45894	0.66611	0.18971	1.0000
Si	Si41	1.0	0.20979	0.28642	0.19277	1.0000
Si	Si42	1.0	0.46687	0.28545	0.19786	1.0000
Si	Si43	1.0	0.46426	0.04001	0.19063	1.0000
Si	Si44	1.0	0.52879	0.47150	0.12696	1.0000
Si	Si45	1.0	0.47081	0.53101	0.62540	1.0000
Si	Si46	1.0	0.53393	0.53005	0.37610	1.0000
Si	Si47	1.0	0.46603	0.46158	0.87671	1.0000
Si	Si48	1.0	0.79319	0.34559	0.70561	1.0000
Si	Si49	1.0	0.34941	0.79804	0.04321	1.0000
Si	Si50	1.0	0.20690	0.65410	0.20345	1.0000
Si	Si51	1.0	0.77808	0.04186	0.81293	1.0000
Si	Si52	1.0	0.84507	0.84115	0.87329	1.0000
Si	Si53	1.0	0.20929	0.04339	0.19969	1.0000
Si	Si54	1.0	0.78782	0.95774	0.70377	1.0000
Si	Si55	1.0	0.47811	0.71590	0.30209	1.0000
Si	Si56	1.0	0.21444	0.95113	0.30849	1.0000

RAI-T1-T1T2T9T3

data_image0

_chemical_formula_structural H4O128Si63

_chemical_formula_sum "H4 O128 Si63"

_cell_length_a 12.5372

_cell_length_b 12.498

_cell_length_c 26.5686

_cell_angle_alpha 90.6917

_cell_angle_beta 90.2111

_cell_angle_gamma 90.3816

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H H1 1.0 0.85129 0.95314 0.63773 1.0000

H H2 1.0 0.86946 0.87454 0.71320 1.0000

H H3 1.0 0.76490 0.99122 0.73286 1.0000

H H4 1.0 0.70117 0.99681 0.66242 1.0000

O O1 1.0 0.30466 0.65620 0.06238 1.0000

O O2 1.0 0.35230 0.82114 0.00310 1.0000

O O3 1.0 0.22842 0.84708 0.08241 1.0000

O O4 1.0 0.43754 0.81083 0.09250 1.0000

:

O	O5	1.0	0.34126	0.50393	0.99364	1.0000
O	O6	1.0	0.23575	0.45934	0.07720	1.0000
O	O7	1.0	0.44437	0.50037	0.07999	1.0000
O	O8	1.0	0.70334	0.66813	0.06733	1.0000
O	O9	1.0	0.83177	0.83776	0.06260	1.0000
O	O10	1.0	0.64213	0.85771	0.10165	1.0000
O	O11	1.0	0.83414	0.49980	0.06036	1.0000
O	O12	1.0	0.64818	0.47949	0.10200	1.0000
O	O13	1.0	0.96151	0.66923	0.05544	1.0000
O	O14	1.0	0.02106	0.84410	0.10414	1.0000
O	O15	1.0	0.02849	0.48766	0.09443	1.0000
O	O16	1.0	0.62951	0.33633	0.56073	1.0000
O	O17	1.0	0.65552	0.17653	0.49419	1.0000
O	O18	1.0	0.77997	0.19116	0.57435	1.0000
O	O19	1.0	0.57495	0.13775	0.58398	1.0000
O	O20	1.0	0.66314	0.49165	0.49450	1.0000
O	O21	1.0	0.77256	0.49107	0.57989	1.0000
O	O22	1.0	0.56412	0.53373	0.57821	1.0000
O	O23	1.0	0.30580	0.32656	0.56214	1.0000
O	O24	1.0	0.16905	0.16147	0.55819	1.0000
O	O25	1.0	0.36183	0.13365	0.59096	1.0000
O	O26	1.0	0.16936	0.48720	0.56579	1.0000
O	O27	1.0	0.36141	0.50900	0.60532	1.0000
O	O28	1.0	0.03080	0.32258	0.55971	1.0000
O	O29	1.0	0.97762	0.13097	0.59468	1.0000
O	O30	1.0	0.97789	0.50753	0.60172	1.0000
O	O31	1.0	0.33784	0.31636	0.31573	1.0000
O	O32	1.0	0.18475	0.34970	0.24738	1.0000
O	O33	1.0	0.14980	0.22049	0.32371	1.0000
O	O34	1.0	0.16674	0.43021	0.33868	1.0000
O	O35	1.0	0.48109	0.34665	0.24288	1.0000
O	O36	1.0	0.52936	0.23221	0.32310	1.0000
O	O37	1.0	0.50726	0.44445	0.32942	1.0000
O	O38	1.0	0.32738	0.70250	0.31847	1.0000

O	O39	1.0	0.15638	0.82537	0.30498	1.0000
O	O40	1.0	0.13582	0.63886	0.34644	1.0000
O	O41	1.0	0.49322	0.83524	0.31307	1.0000
O	O42	1.0	0.51224	0.64846	0.35723	1.0000
O	O43	1.0	0.32197	0.95981	0.30601	1.0000
O	O44	1.0	0.13757	0.01456	0.34727	1.0000
O	O45	1.0	0.49732	0.02980	0.35064	1.0000
O	O46	1.0	0.67219	0.70072	0.81761	1.0000
O	O47	1.0	0.82320	0.67338	0.74731	1.0000
O	O48	1.0	0.86874	0.76710	0.83473	1.0000
O	O49	1.0	0.82670	0.55778	0.82814	1.0000
O	O50	1.0	0.52340	0.66861	0.74766	1.0000
O	O51	1.0	0.47982	0.77946	0.83113	1.0000
O	O52	1.0	0.50607	0.56964	0.83333	1.0000
O	O53	1.0	0.66879	0.31732	0.81429	1.0000
O	O54	1.0	0.81729	0.16252	0.81818	1.0000
O	O55	1.0	0.85985	0.35697	0.85055	1.0000
O	O56	1.0	0.51365	0.17172	0.81351	1.0000
O	O57	1.0	0.47234	0.36294	0.84408	1.0000
O	O58	1.0	0.66172	0.01773	0.81589	1.0000
O	O59	1.0	0.84974	0.97482	0.85664	1.0000
O	O60	1.0	0.47120	0.98690	0.85275	1.0000
O	O61	1.0	0.65233	0.66382	0.93546	1.0000
O	O62	1.0	0.66026	0.82348	0.00311	1.0000
O	O63	1.0	0.78360	0.82785	0.92255	1.0000
O	O64	1.0	0.57329	0.85495	0.91473	1.0000
O	O65	1.0	0.66040	0.50834	0.00333	1.0000
O	O66	1.0	0.76995	0.48948	0.91885	1.0000
O	O67	1.0	0.55763	0.47676	0.91916	1.0000
O	O68	1.0	0.29311	0.67149	0.93726	1.0000
O	O69	1.0	0.17478	0.84549	0.94879	1.0000
O	O70	1.0	0.36117	0.85802	0.90566	1.0000
O	O71	1.0	0.16454	0.50255	0.93695	1.0000
O	O72	1.0	0.35302	0.49293	0.89396	1.0000

O	O73	1.0	0.04343	0.67671	0.94550	1.0000
O	O74	1.0	0.98842	0.86092	0.90478	1.0000
O	O75	1.0	0.97438	0.50490	0.89593	1.0000
O	O76	1.0	0.30434	0.34242	0.43807	1.0000
O	O77	1.0	0.33496	0.17123	0.49513	1.0000
O	O78	1.0	0.23283	0.15201	0.40944	1.0000
O	O79	1.0	0.44295	0.19172	0.41173	1.0000
O	O80	1.0	0.33856	0.49802	0.50571	1.0000
O	O81	1.0	0.24096	0.53787	0.41867	1.0000
O	O82	1.0	0.44909	0.49751	0.42223	1.0000
O	O83	1.0	0.70909	0.33163	0.43143	1.0000
O	O84	1.0	0.83244	0.16030	0.43871	1.0000
O	O85	1.0	0.64488	0.14344	0.39566	1.0000
O	O86	1.0	0.83877	0.50071	0.44005	1.0000
O	O87	1.0	0.65107	0.51861	0.39602	1.0000
O	O88	1.0	0.96362	0.32941	0.44220	1.0000
O	O89	1.0	0.02144	0.15090	0.39660	1.0000
O	O90	1.0	0.03125	0.51250	0.40464	1.0000
O	O91	1.0	0.67183	0.30411	0.68431	1.0000
O	O92	1.0	0.83239	0.31843	0.75189	1.0000
O	O93	1.0	0.85367	0.20592	0.66786	1.0000
O	O94	1.0	0.84554	0.42113	0.66743	1.0000
O	O95	1.0	0.51032	0.33089	0.74768	1.0000
O	O96	1.0	0.47640	0.24370	0.65790	1.0000
O	O97	1.0	0.52125	0.44985	0.66720	1.0000
O	O98	1.0	0.67296	0.72357	0.68099	1.0000
O	O99	1.0	0.86163	0.83050	0.68224	1.0000
O	O100	1.0	0.84626	0.63040	0.64950	1.0000
O	O101	1.0	0.50158	0.84198	0.69104	1.0000
O	O102	1.0	0.48131	0.65274	0.65074	1.0000
O	O103	1.0	0.66202	0.99135	0.69489	1.0000
O	O104	1.0	0.80950	0.01363	0.62500	1.0000
O	O105	1.0	0.47173	0.02996	0.65440	1.0000
O	O106	1.0	0.34437	0.67840	0.18565	1.0000

O	O107	1.0	0.18272	0.64867	0.24940	1.0000
O	O108	1.0	0.16234	0.77729	0.17170	1.0000
O	O109	1.0	0.17235	0.56568	0.15874	1.0000
O	O110	1.0	0.48997	0.65488	0.25817	1.0000
O	O111	1.0	0.53560	0.76816	0.17764	1.0000
O	O112	1.0	0.51447	0.55576	0.17140	1.0000
O	O113	1.0	0.32679	0.29335	0.17810	1.0000
O	O114	1.0	0.15677	0.17044	0.19310	1.0000
O	O115	1.0	0.13484	0.35728	0.15059	1.0000
O	O116	1.0	0.49546	0.16599	0.18931	1.0000
O	O117	1.0	0.51383	0.35152	0.14437	1.0000
O	O118	1.0	0.32507	0.03958	0.19392	1.0000
O	O119	1.0	0.14533	0.98278	0.14855	1.0000
O	O120	1.0	0.50406	0.97111	0.15220	1.0000
O	O121	1.0	0.00114	0.84495	0.00415	1.0000
O	O122	1.0	0.99473	0.50124	0.99576	1.0000
O	O123	1.0	0.00460	0.15751	0.49624	1.0000
O	O124	1.0	0.00486	0.49422	0.50290	1.0000
O	O125	1.0	0.15327	0.99671	0.24818	1.0000
O	O126	1.0	0.49369	0.00057	0.25126	1.0000
O	O127	1.0	0.82704	0.98700	0.75669	1.0000
O	O128	1.0	0.49506	0.00500	0.75363	1.0000
Si	Si1	1.0	0.33125	0.78397	0.06056	1.0000
Si	Si2	1.0	0.33228	0.52992	0.05351	1.0000
Si	Si3	1.0	0.70935	0.79630	0.05828	1.0000
Si	Si4	1.0	0.71181	0.53991	0.05775	1.0000
Si	Si5	1.0	0.95383	0.79855	0.05638	1.0000
Si	Si6	1.0	0.95532	0.54000	0.05127	1.0000
Si	Si7	1.0	0.52954	0.85202	0.13118	1.0000
Si	Si8	1.0	0.65964	0.21046	0.55332	1.0000
Si	Si9	1.0	0.65855	0.46293	0.55363	1.0000
Si	Si10	1.0	0.29173	0.19948	0.55123	1.0000
Si	Si11	1.0	0.29367	0.45534	0.55943	1.0000
Si	Si12	1.0	0.04529	0.19425	0.55199	1.0000

Si	Si13	1.0	0.04602	0.45186	0.55719	1.0000
Si	Si14	1.0	0.47267	0.13793	0.62182	1.0000
Si	Si15	1.0	0.20987	0.32966	0.30647	1.0000
Si	Si16	1.0	0.46384	0.33535	0.30297	1.0000
Si	Si17	1.0	0.20130	0.70431	0.30448	1.0000
Si	Si18	1.0	0.45561	0.71080	0.31132	1.0000
Si	Si19	1.0	0.19321	0.94922	0.30150	1.0000
Si	Si20	1.0	0.45113	0.95626	0.30495	1.0000
Si	Si21	1.0	0.14471	0.52861	0.37736	1.0000
Si	Si22	1.0	0.79739	0.67484	0.80697	1.0000
Si	Si23	1.0	0.54536	0.67929	0.80763	1.0000
Si	Si24	1.0	0.79448	0.28772	0.80846	1.0000
Si	Si25	1.0	0.54250	0.29553	0.80432	1.0000
Si	Si26	1.0	0.78997	0.03613	0.81138	1.0000
Si	Si27	1.0	0.53660	0.04571	0.80857	1.0000
Si	Si28	1.0	0.85676	0.47780	0.87372	1.0000
Si	Si29	1.0	0.66740	0.79237	0.94366	1.0000
Si	Si30	1.0	0.66104	0.53526	0.94388	1.0000
Si	Si31	1.0	0.29485	0.79869	0.94890	1.0000
Si	Si32	1.0	0.28764	0.54254	0.94090	1.0000
Si	Si33	1.0	0.05171	0.80600	0.95085	1.0000
Si	Si34	1.0	0.04405	0.54701	0.94365	1.0000
Si	Si35	1.0	0.47307	0.86823	0.87638	1.0000
Si	Si36	1.0	0.32924	0.21459	0.43798	1.0000
Si	Si37	1.0	0.33376	0.46894	0.44597	1.0000
Si	Si38	1.0	0.71083	0.20344	0.44034	1.0000
Si	Si39	1.0	0.71583	0.46007	0.44067	1.0000
Si	Si40	1.0	0.95545	0.20006	0.44355	1.0000
Si	Si41	1.0	0.95956	0.45855	0.44780	1.0000
Si	Si42	1.0	0.52761	0.14930	0.37002	1.0000
Si	Si43	1.0	0.80057	0.31281	0.69276	1.0000
Si	Si44	1.0	0.54558	0.33227	0.68916	1.0000
Si	Si45	1.0	0.80077	0.71500	0.69047	1.0000
Si	Si46	1.0	0.54613	0.72125	0.69303	1.0000

Si	Si47	1.0	0.53328	0.96666	0.69823	1.0000
Si	Si48	1.0	0.85878	0.51226	0.62491	1.0000
Si	Si49	1.0	0.21548	0.66692	0.19106	1.0000
Si	Si50	1.0	0.47090	0.66390	0.19796	1.0000
Si	Si51	1.0	0.20107	0.29238	0.19253	1.0000
Si	Si52	1.0	0.45409	0.28866	0.18909	1.0000
Si	Si53	1.0	0.19600	0.04752	0.19608	1.0000
Si	Si54	1.0	0.45416	0.04403	0.19686	1.0000
Si	Si55	1.0	0.14346	0.46843	0.12005	1.0000
Si	Si56	1.0	0.13998	0.86143	0.12659	1.0000
Si	Si57	1.0	0.52869	0.47270	0.12445	1.0000
Si	Si58	1.0	0.85637	0.13490	0.61601	1.0000
Si	Si59	1.0	0.48143	0.53463	0.62526	1.0000
Si	Si60	1.0	0.13571	0.13580	0.36946	1.0000
Si	Si61	1.0	0.52887	0.52677	0.37618	1.0000
Si	Si62	1.0	0.87075	0.85737	0.87951	1.0000
Si	Si63	1.0	0.47286	0.47737	0.87279	1.0000

RA1-T2-T1T2T4T7

data_image0
_chemical_formula_structural H4O128Si63
_chemical_formula_sum "H4 O128 Si63"
_cell_length_a 12.5034
_cell_length_b 12.5551
_cell_length_c 26.4341
_cell_angle_alpha 89.6898
_cell_angle_beta 90.27
_cell_angle_gamma 90.208

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.53503	0.85894	0.34965	1.0000
H	H2	1.0	0.52791	0.01141	0.31583	1.0000
H	H3	1.0	0.34623	0.97099	0.34151	1.0000
H	H4	1.0	0.41044	0.98604	0.26951	1.0000
O	O1	1.0	0.29778	0.66415	0.06127	1.0000
O	O2	1.0	0.34601	0.82680	0.99992	1.0000
O	O3	1.0	0.23084	0.85746	0.08221	1.0000
O	O4	1.0	0.43950	0.81098	0.08851	1.0000

O	O5	1.0	0.34122	0.51116	0.99521	1.0000
O	O6	1.0	0.23719	0.46779	0.08061	1.0000
O	O7	1.0	0.44527	0.51508	0.08174	1.0000
O	O8	1.0	0.70797	0.66991	0.07062	1.0000
O	O9	1.0	0.83075	0.84215	0.05805	1.0000
O	O10	1.0	0.64283	0.86094	0.09937	1.0000
O	O11	1.0	0.83468	0.49999	0.06123	1.0000
O	O12	1.0	0.64807	0.48258	0.10576	1.0000
O	O13	1.0	0.95551	0.67199	0.05158	1.0000
O	O14	1.0	0.02109	0.84155	0.10050	1.0000
O	O15	1.0	0.02948	0.50014	0.09795	1.0000
O	O16	1.0	0.69662	0.34252	0.56212	1.0000
O	O17	1.0	0.66074	0.18646	0.49701	1.0000
O	O18	1.0	0.75226	0.14576	0.58648	1.0000
O	O19	1.0	0.54704	0.19388	0.58044	1.0000
O	O20	1.0	0.67089	0.50307	0.49580	1.0000
O	O21	1.0	0.77975	0.53121	0.58018	1.0000
O	O22	1.0	0.56703	0.50624	0.58069	1.0000
O	O23	1.0	0.29868	0.31997	0.56854	1.0000
O	O24	1.0	0.16045	0.15967	0.56457	1.0000
O	O25	1.0	0.35203	0.13133	0.60397	1.0000
O	O26	1.0	0.17249	0.49002	0.55760	1.0000
O	O27	1.0	0.35973	0.51029	0.60080	1.0000
O	O28	1.0	0.03231	0.33059	0.55862	1.0000
O	O29	1.0	0.96361	0.14531	0.59324	1.0000
O	O30	1.0	0.98698	0.51126	0.60429	1.0000
O	O31	1.0	0.34105	0.35584	0.31336	1.0000
O	O32	1.0	0.17467	0.34007	0.24984	1.0000
O	O33	1.0	0.18234	0.22026	0.33224	1.0000
O	O34	1.0	0.15026	0.42987	0.33795	1.0000
O	O35	1.0	0.49034	0.32830	0.24242	1.0000
O	O36	1.0	0.49795	0.21626	0.32757	1.0000
O	O37	1.0	0.54029	0.42374	0.32706	1.0000
O	O38	1.0	0.33763	0.74698	0.31459	1.0000

O	O39	1.0	0.14833	0.83149	0.30948	1.0000
O	O40	1.0	0.16601	0.64144	0.35021	1.0000
O	O41	1.0	0.46899	0.61318	0.35659	1.0000
O	O42	1.0	0.30887	0.98078	0.30938	1.0000
O	O43	1.0	0.11540	0.02142	0.34649	1.0000
O	O44	1.0	0.51583	0.01461	0.35285	1.0000
O	O45	1.0	0.65842	0.69713	0.81397	1.0000
O	O46	1.0	0.81863	0.65585	0.75084	1.0000
O	O47	1.0	0.85200	0.76794	0.83409	1.0000
O	O48	1.0	0.81117	0.55877	0.83794	1.0000
O	O49	1.0	0.50983	0.66535	0.74324	1.0000
O	O50	1.0	0.46220	0.76315	0.82908	1.0000
O	O51	1.0	0.50092	0.55433	0.82754	1.0000
O	O52	1.0	0.67139	0.29373	0.82112	1.0000
O	O53	1.0	0.84216	0.16850	0.81224	1.0000
O	O54	1.0	0.86248	0.35755	0.85116	1.0000
O	O55	1.0	0.50274	0.16450	0.81114	1.0000
O	O56	1.0	0.48147	0.35168	0.85382	1.0000
O	O57	1.0	0.67351	0.04002	0.80324	1.0000
O	O58	1.0	0.84936	0.97709	0.85055	1.0000
O	O59	1.0	0.49623	0.96981	0.84591	1.0000
O	O60	1.0	0.68771	0.65885	0.93475	1.0000
O	O61	1.0	0.65515	0.81507	0.00161	1.0000
O	O62	1.0	0.77718	0.84587	0.92130	1.0000
O	O63	1.0	0.56591	0.82555	0.91200	1.0000
O	O64	1.0	0.65578	0.51351	0.00696	1.0000
O	O65	1.0	0.77137	0.46699	0.92610	1.0000
O	O66	1.0	0.55971	0.49178	0.91983	1.0000
O	O67	1.0	0.30174	0.67484	0.93331	1.0000
O	O68	1.0	0.17219	0.84212	0.94175	1.0000
O	O69	1.0	0.36012	0.86664	0.90158	1.0000
O	O70	1.0	0.16691	0.50963	0.93678	1.0000
O	O71	1.0	0.35503	0.48954	0.89542	1.0000
O	O72	1.0	0.03775	0.67671	0.94407	1.0000

O	O73	1.0	0.98375	0.85839	0.89993	1.0000
O	O74	1.0	0.97358	0.50189	0.89829	1.0000
O	O75	1.0	0.29972	0.31276	0.43833	1.0000
O	O76	1.0	0.33081	0.15683	0.50495	1.0000
O	O77	1.0	0.22442	0.12073	0.41901	1.0000
O	O78	1.0	0.43483	0.15042	0.41942	1.0000
O	O79	1.0	0.35084	0.46990	0.50292	1.0000
O	O80	1.0	0.25227	0.51264	0.41728	1.0000
O	O81	1.0	0.45709	0.44769	0.41847	1.0000
O	O82	1.0	0.70755	0.34500	0.43246	1.0000
O	O83	1.0	0.83306	0.17644	0.43820	1.0000
O	O84	1.0	0.64069	0.15864	0.39831	1.0000
O	O85	1.0	0.83946	0.51393	0.43460	1.0000
O	O86	1.0	0.64584	0.53252	0.39712	1.0000
O	O87	1.0	0.96484	0.34493	0.44261	1.0000
O	O88	1.0	0.02216	0.17233	0.39539	1.0000
O	O89	1.0	0.04022	0.52986	0.40781	1.0000
O	O90	1.0	0.66446	0.31589	0.68401	1.0000
O	O91	1.0	0.82073	0.33793	0.75265	1.0000
O	O92	1.0	0.84983	0.22483	0.66889	1.0000
O	O93	1.0	0.83648	0.43615	0.66607	1.0000
O	O94	1.0	0.51647	0.34124	0.75563	1.0000
O	O95	1.0	0.47165	0.23372	0.67220	1.0000
O	O96	1.0	0.49826	0.44539	0.67101	1.0000
O	O97	1.0	0.67330	0.70702	0.68130	1.0000
O	O98	1.0	0.84636	0.83019	0.69459	1.0000
O	O99	1.0	0.86721	0.64330	0.65407	1.0000
O	O100	1.0	0.50543	0.83824	0.68387	1.0000
O	O101	1.0	0.48580	0.64836	0.64427	1.0000
O	O102	1.0	0.67814	0.95762	0.69645	1.0000
O	O103	1.0	0.85536	0.01746	0.65014	1.0000
O	O104	1.0	0.51322	0.03321	0.64624	1.0000
O	O105	1.0	0.34672	0.68344	0.18437	1.0000
O	O106	1.0	0.19165	0.66087	0.25227	1.0000

O	O107	1.0	0.16146	0.77874	0.17019	1.0000
O	O108	1.0	0.17414	0.56688	0.16441	1.0000
O	O109	1.0	0.49032	0.65742	0.25910	1.0000
O	O110	1.0	0.54016	0.76311	0.17434	1.0000
O	O111	1.0	0.51195	0.55193	0.17559	1.0000
O	O112	1.0	0.32312	0.29261	0.18244	1.0000
O	O113	1.0	0.15013	0.17040	0.19065	1.0000
O	O114	1.0	0.13317	0.36172	0.15222	1.0000
O	O115	1.0	0.49016	0.16102	0.18161	1.0000
O	O116	1.0	0.50526	0.35357	0.14276	1.0000
O	O117	1.0	0.31699	0.03753	0.18780	1.0000
O	O118	1.0	0.13228	0.98337	0.14757	1.0000
O	O119	1.0	0.50009	0.96647	0.15025	1.0000
O	O120	1.0	0.00231	0.84753	0.00021	1.0000
O	O121	1.0	0.00040	0.50125	0.99820	1.0000
O	O122	1.0	0.00720	0.16941	0.49545	1.0000
O	O123	1.0	0.99275	0.50646	0.50473	1.0000
O	O124	1.0	0.14897	0.99701	0.24702	1.0000
O	O125	1.0	0.47731	0.99996	0.24996	1.0000
O	O126	1.0	0.84999	0.00379	0.75070	1.0000
O	O127	1.0	0.50189	0.00367	0.74636	1.0000
O	O128	1.0	0.54566	0.80249	0.32501	1.0000
Si	Si1	1.0	0.32917	0.79045	0.05841	1.0000
Si	Si2	1.0	0.33132	0.53929	0.05490	1.0000
Si	Si3	1.0	0.70930	0.79644	0.05715	1.0000
Si	Si4	1.0	0.71222	0.54236	0.06081	1.0000
Si	Si5	1.0	0.95261	0.80070	0.05248	1.0000
Si	Si6	1.0	0.95544	0.54330	0.05219	1.0000
Si	Si7	1.0	0.52965	0.85033	0.12867	1.0000
Si	Si8	1.0	0.66419	0.21718	0.55665	1.0000
Si	Si9	1.0	0.67799	0.47039	0.55504	1.0000
Si	Si10	1.0	0.28523	0.19257	0.55995	1.0000
Si	Si11	1.0	0.29468	0.44708	0.55733	1.0000
Si	Si12	1.0	0.04083	0.20235	0.55279	1.0000

Si	Si13	1.0	0.04661	0.45908	0.55616	1.0000
Si	Si14	1.0	0.47232	0.14806	0.62612	1.0000
Si	Si15	1.0	0.21246	0.33613	0.30850	1.0000
Si	Si16	1.0	0.46688	0.33040	0.30247	1.0000
Si	Si17	1.0	0.21169	0.71877	0.30644	1.0000
Si	Si18	1.0	0.17921	0.95640	0.30329	1.0000
Si	Si19	1.0	0.15287	0.52749	0.37805	1.0000
Si	Si20	1.0	0.78536	0.66978	0.80963	1.0000
Si	Si21	1.0	0.53265	0.66912	0.80363	1.0000
Si	Si22	1.0	0.79850	0.28951	0.80889	1.0000
Si	Si23	1.0	0.54366	0.28713	0.81015	1.0000
Si	Si24	1.0	0.80305	0.04685	0.80404	1.0000
Si	Si25	1.0	0.54405	0.04411	0.80150	1.0000
Si	Si26	1.0	0.85454	0.47208	0.87876	1.0000
Si	Si27	1.0	0.67079	0.78635	0.94234	1.0000
Si	Si28	1.0	0.66840	0.53274	0.94670	1.0000
Si	Si29	1.0	0.29470	0.80172	0.94449	1.0000
Si	Si30	1.0	0.29090	0.54680	0.94068	1.0000
Si	Si31	1.0	0.04875	0.80533	0.94664	1.0000
Si	Si32	1.0	0.04461	0.54788	0.94463	1.0000
Si	Si33	1.0	0.47239	0.85573	0.87189	1.0000
Si	Si34	1.0	0.32320	0.18552	0.44520	1.0000
Si	Si35	1.0	0.34010	0.43617	0.44397	1.0000
Si	Si36	1.0	0.71028	0.21731	0.44185	1.0000
Si	Si37	1.0	0.71680	0.47304	0.44031	1.0000
Si	Si38	1.0	0.95618	0.21631	0.44325	1.0000
Si	Si39	1.0	0.95966	0.47341	0.44735	1.0000
Si	Si40	1.0	0.52260	0.13675	0.37483	1.0000
Si	Si41	1.0	0.79290	0.32897	0.69289	1.0000
Si	Si42	1.0	0.53788	0.33407	0.69550	1.0000
Si	Si43	1.0	0.80012	0.70946	0.69538	1.0000
Si	Si44	1.0	0.54446	0.71526	0.68870	1.0000
Si	Si45	1.0	0.80733	0.95261	0.69797	1.0000
Si	Si46	1.0	0.54913	0.95841	0.69336	1.0000

Si	Si47	1.0	0.86722	0.52923	0.62597	1.0000
Si	Si48	1.0	0.21840	0.67223	0.19239	1.0000
Si	Si49	1.0	0.47241	0.66449	0.19853	1.0000
Si	Si50	1.0	0.19597	0.29096	0.19400	1.0000
Si	Si51	1.0	0.45205	0.28348	0.18763	1.0000
Si	Si52	1.0	0.18846	0.04753	0.19351	1.0000
Si	Si53	1.0	0.44678	0.04107	0.19282	1.0000
Si	Si54	1.0	0.14423	0.47546	0.12352	1.0000
Si	Si55	1.0	0.13759	0.86389	0.12487	1.0000
Si	Si56	1.0	0.52640	0.47640	0.12645	1.0000
Si	Si57	1.0	0.85410	0.13504	0.62471	1.0000
Si	Si58	1.0	0.47856	0.52690	0.62410	1.0000
Si	Si59	1.0	0.13640	0.13554	0.37357	1.0000
Si	Si60	1.0	0.52795	0.50528	0.37434	1.0000
Si	Si61	1.0	0.86421	0.86120	0.87629	1.0000
Si	Si62	1.0	0.47492	0.47307	0.87412	1.0000
Si	Si63	1.0	0.46172	0.70720	0.31410	1.0000

RAI-T7-T2T3T6T5

data_image0

_chemical_formula_structural H4O128Si63
_chemical_formula_sum "H4 O128 Si63"
_cell_length_a 12.527
_cell_length_b 12.5324
_cell_length_c 26.2543
_cell_angle_alpha 89.7317
_cell_angle_beta 90.4542
_cell_angle_gamma 89.9108

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H	H1	1.0	0.49275	0.13103	0.53588	1.0000
H	H2	1.0	0.37039	0.08172	0.62020	1.0000
H	H3	1.0	0.52490	0.04126	0.60792	1.0000
H	H4	1.0	0.44817	0.21849	0.64993	1.0000
O	O1	1.0	0.32729	0.66388	0.06973	1.0000
O	O2	1.0	0.34656	0.81272	0.99758	1.0000
O	O3	1.0	0.21809	0.84486	0.07519	1.0000
O	O4	1.0	0.42755	0.84803	0.08838	1.0000

O	O5	1.0	0.34419	0.52579	0.99248	1.0000
O	O6	1.0	0.23438	0.47347	0.07430	1.0000
O	O7	1.0	0.44702	0.48947	0.07766	1.0000
O	O8	1.0	0.70755	0.67906	0.06899	1.0000
O	O9	1.0	0.82753	0.84955	0.05305	1.0000
O	O10	1.0	0.63847	0.87017	0.09445	1.0000
O	O11	1.0	0.83593	0.50964	0.06462	1.0000
O	O12	1.0	0.64809	0.49666	0.10920	1.0000
O	O13	1.0	0.95943	0.68046	0.05552	1.0000
O	O14	1.0	0.01360	0.86355	0.09782	1.0000
O	O15	1.0	0.03201	0.50472	0.10036	1.0000
O	O16	1.0	0.63527	0.32031	0.56128	1.0000
O	O17	1.0	0.69893	0.18077	0.49126	1.0000
O	O18	1.0	0.75142	0.14961	0.58766	1.0000
O	O19	1.0	0.66460	0.48655	0.50075	1.0000
O	O20	1.0	0.77861	0.46908	0.58562	1.0000
O	O21	1.0	0.57035	0.51426	0.58825	1.0000
O	O22	1.0	0.28918	0.33030	0.57030	1.0000
O	O23	1.0	0.15654	0.16574	0.55966	1.0000
O	O24	1.0	0.16990	0.50411	0.56092	1.0000
O	O25	1.0	0.35864	0.51737	0.60194	1.0000
O	O26	1.0	0.03500	0.33991	0.55543	1.0000
O	O27	1.0	0.96261	0.16413	0.59833	1.0000
O	O28	1.0	0.98140	0.51874	0.60236	1.0000
O	O29	1.0	0.33921	0.37577	0.30898	1.0000
O	O30	1.0	0.17312	0.33095	0.24807	1.0000
O	O31	1.0	0.20480	0.22218	0.33421	1.0000
O	O32	1.0	0.14232	0.42665	0.33543	1.0000
O	O33	1.0	0.50003	0.32943	0.24641	1.0000
O	O34	1.0	0.48623	0.23308	0.33595	1.0000
O	O35	1.0	0.53575	0.44082	0.32887	1.0000
O	O36	1.0	0.32978	0.71674	0.30895	1.0000
O	O37	1.0	0.15416	0.83281	0.30977	1.0000
O	O38	1.0	0.15337	0.63908	0.34796	1.0000

O	O39	1.0	0.50020	0.83912	0.31614	1.0000
O	O40	1.0	0.50036	0.64437	0.35480	1.0000
O	O41	1.0	0.32519	0.96088	0.31108	1.0000
O	O42	1.0	0.14225	0.02339	0.35056	1.0000
O	O43	1.0	0.49947	0.02768	0.35900	1.0000
O	O44	1.0	0.66629	0.68574	0.81195	1.0000
O	O45	1.0	0.82242	0.65027	0.74469	1.0000
O	O46	1.0	0.86317	0.75090	0.83037	1.0000
O	O47	1.0	0.81997	0.54243	0.83051	1.0000
O	O48	1.0	0.50332	0.65444	0.74836	1.0000
O	O49	1.0	0.46899	0.73861	0.83913	1.0000
O	O50	1.0	0.51926	0.53588	0.83095	1.0000
O	O51	1.0	0.66267	0.28484	0.82048	1.0000
O	O52	1.0	0.82837	0.15320	0.81683	1.0000
O	O53	1.0	0.84699	0.34386	0.86113	1.0000
O	O54	1.0	0.49258	0.15471	0.81442	1.0000
O	O55	1.0	0.47167	0.33910	0.85470	1.0000
O	O56	1.0	0.65842	0.02696	0.80212	1.0000
O	O57	1.0	0.83047	0.95719	0.84914	1.0000
O	O58	1.0	0.47155	0.94815	0.82676	1.0000
O	O59	1.0	0.63818	0.65908	0.93208	1.0000
O	O60	1.0	0.65120	0.82024	0.99729	1.0000
O	O61	1.0	0.78416	0.81039	0.91971	1.0000
O	O62	1.0	0.57881	0.85654	0.90430	1.0000
O	O63	1.0	0.65723	0.51768	0.00878	1.0000
O	O64	1.0	0.76821	0.49020	0.92535	1.0000
O	O65	1.0	0.55592	0.46603	0.92511	1.0000
O	O66	1.0	0.29058	0.67520	0.92518	1.0000
O	O67	1.0	0.17231	0.84612	0.93984	1.0000
O	O68	1.0	0.36515	0.86666	0.90154	1.0000
O	O69	1.0	0.16563	0.50512	0.93730	1.0000
O	O70	1.0	0.35442	0.48842	0.89350	1.0000
O	O71	1.0	0.04103	0.67601	0.94130	1.0000
O	O72	1.0	0.98392	0.85626	0.89618	1.0000

O	O73	1.0	0.97094	0.49512	0.89969	1.0000
O	O74	1.0	0.31153	0.32071	0.44187	1.0000
O	O75	1.0	0.34474	0.16638	0.51305	1.0000
O	O76	1.0	0.25112	0.12461	0.42262	1.0000
O	O77	1.0	0.45965	0.16867	0.43188	1.0000
O	O78	1.0	0.34404	0.48273	0.50395	1.0000
O	O79	1.0	0.22963	0.50896	0.41941	1.0000
O	O80	1.0	0.44011	0.48235	0.41569	1.0000
O	O81	1.0	0.70820	0.34424	0.42792	1.0000
O	O82	1.0	0.84788	0.18192	0.42102	1.0000
O	O83	1.0	0.65025	0.15670	0.39204	1.0000
O	O84	1.0	0.83312	0.51391	0.44125	1.0000
O	O85	1.0	0.64245	0.53737	0.40372	1.0000
O	O86	1.0	0.96875	0.34860	0.44372	1.0000
O	O87	1.0	0.05088	0.17861	0.40053	1.0000
O	O88	1.0	0.02174	0.53122	0.40119	1.0000
O	O89	1.0	0.67377	0.35977	0.69317	1.0000
O	O90	1.0	0.82966	0.32915	0.76094	1.0000
O	O91	1.0	0.83402	0.22521	0.67351	1.0000
O	O92	1.0	0.86706	0.43502	0.67657	1.0000
O	O93	1.0	0.50706	0.32667	0.75469	1.0000
O	O94	1.0	0.48587	0.44907	0.67580	1.0000
O	O95	1.0	0.66039	0.70779	0.68555	1.0000
O	O96	1.0	0.83430	0.82701	0.68694	1.0000
O	O97	1.0	0.83602	0.63563	0.64443	1.0000
O	O98	1.0	0.49613	0.83783	0.69729	1.0000
O	O99	1.0	0.47381	0.65421	0.64870	1.0000
O	O100	1.0	0.66844	0.96171	0.68282	1.0000
O	O101	1.0	0.85833	0.02107	0.65004	1.0000
O	O102	1.0	0.33932	0.69895	0.18920	1.0000
O	O103	1.0	0.17017	0.66244	0.24868	1.0000
O	O104	1.0	0.14537	0.76309	0.16165	1.0000
O	O105	1.0	0.19154	0.55535	0.16446	1.0000
O	O106	1.0	0.50074	0.67008	0.25432	1.0000

O	O107	1.0	0.53634	0.75138	0.16252	1.0000
O	O108	1.0	0.48787	0.54777	0.17323	1.0000
O	O109	1.0	0.33372	0.30248	0.18428	1.0000
O	O110	1.0	0.17152	0.16511	0.18566	1.0000
O	O111	1.0	0.14318	0.35567	0.14755	1.0000
O	O112	1.0	0.49400	0.16139	0.18569	1.0000
O	O113	1.0	0.52253	0.34981	0.14612	1.0000
O	O114	1.0	0.33230	0.02471	0.19425	1.0000
O	O115	1.0	0.15093	0.97375	0.14954	1.0000
O	O116	1.0	0.52063	0.96258	0.16128	1.0000
O	O117	1.0	0.00110	0.84798	0.99699	1.0000
O	O118	1.0	0.99927	0.50864	0.00004	1.0000
O	O119	1.0	0.98891	0.17173	0.49787	1.0000
O	O120	1.0	0.00079	0.51742	0.50186	1.0000
O	O121	1.0	0.15902	0.00275	0.25012	1.0000
O	O122	1.0	0.49702	0.01405	0.25833	1.0000
O	O123	1.0	0.83109	0.99361	0.74887	1.0000
O	O124	1.0	0.49960	0.03057	0.73397	1.0000
O	O125	1.0	0.55513	0.12007	0.55806	1.0000
O	O126	1.0	0.33703	0.15301	0.61590	1.0000
O	O127	1.0	0.52073	0.23766	0.66115	1.0000
O	O128	1.0	0.48303	0.99890	0.63300	1.0000
Si	Si1	1.0	0.33041	0.79191	0.05790	1.0000
Si	Si2	1.0	0.33803	0.53845	0.05364	1.0000
Si	Si3	1.0	0.70661	0.80423	0.05306	1.0000
Si	Si4	1.0	0.71288	0.55064	0.06251	1.0000
Si	Si5	1.0	0.95025	0.80935	0.05055	1.0000
Si	Si6	1.0	0.95689	0.55114	0.05480	1.0000
Si	Si7	1.0	0.52951	0.85738	0.12658	1.0000
Si	Si8	1.0	0.66234	0.44740	0.55968	1.0000
Si	Si9	1.0	0.28044	0.20217	0.56520	1.0000
Si	Si10	1.0	0.29013	0.45763	0.55898	1.0000
Si	Si11	1.0	0.03528	0.21077	0.55295	1.0000
Si	Si12	1.0	0.04636	0.46894	0.55520	1.0000

Si	Si13	1.0	0.21448	0.33838	0.30669	1.0000
Si	Si14	1.0	0.46548	0.34409	0.30518	1.0000
Si	Si15	1.0	0.20163	0.71299	0.30366	1.0000
Si	Si16	1.0	0.45831	0.71767	0.30813	1.0000
Si	Si17	1.0	0.19613	0.95483	0.30513	1.0000
Si	Si18	1.0	0.45467	0.96017	0.31088	1.0000
Si	Si19	1.0	0.13840	0.52518	0.37559	1.0000
Si	Si20	1.0	0.79257	0.65674	0.80462	1.0000
Si	Si21	1.0	0.53995	0.65360	0.80769	1.0000
Si	Si22	1.0	0.79141	0.27756	0.81475	1.0000
Si	Si23	1.0	0.53467	0.27659	0.81027	1.0000
Si	Si24	1.0	0.78724	0.03342	0.80379	1.0000
Si	Si25	1.0	0.53075	0.03950	0.79405	1.0000
Si	Si26	1.0	0.85143	0.46795	0.87928	1.0000
Si	Si27	1.0	0.66273	0.78642	0.93797	1.0000
Si	Si28	1.0	0.65561	0.53366	0.94754	1.0000
Si	Si29	1.0	0.29315	0.79992	0.94125	1.0000
Si	Si30	1.0	0.28785	0.54841	0.93742	1.0000
Si	Si31	1.0	0.04988	0.80534	0.94374	1.0000
Si	Si32	1.0	0.04370	0.54662	0.94464	1.0000
Si	Si33	1.0	0.47233	0.85275	0.86808	1.0000
Si	Si34	1.0	0.34051	0.19571	0.45201	1.0000
Si	Si35	1.0	0.33193	0.44941	0.44470	1.0000
Si	Si36	1.0	0.72589	0.21636	0.43346	1.0000
Si	Si37	1.0	0.71251	0.46916	0.44421	1.0000
Si	Si38	1.0	0.96459	0.21977	0.44114	1.0000
Si	Si39	1.0	0.95609	0.47699	0.44716	1.0000
Si	Si40	1.0	0.52402	0.14723	0.37891	1.0000
Si	Si41	1.0	0.80026	0.33635	0.70082	1.0000
Si	Si42	1.0	0.54518	0.34118	0.69602	1.0000
Si	Si43	1.0	0.78875	0.70587	0.69069	1.0000
Si	Si44	1.0	0.53329	0.71438	0.69530	1.0000
Si	Si45	1.0	0.79651	0.95059	0.69262	1.0000
Si	Si46	1.0	0.53855	0.95840	0.68608	1.0000

Si	Si47	1.0	0.86384	0.51463	0.62751	1.0000
Si	Si48	1.0	0.21224	0.66988	0.19043	1.0000
Si	Si49	1.0	0.46546	0.66674	0.19462	1.0000
Si	Si50	1.0	0.20580	0.28879	0.19162	1.0000
Si	Si51	1.0	0.46170	0.28576	0.19097	1.0000
Si	Si52	1.0	0.20393	0.04169	0.19518	1.0000
Si	Si53	1.0	0.46020	0.04066	0.20007	1.0000
Si	Si54	1.0	0.14981	0.47292	0.12117	1.0000
Si	Si55	1.0	0.13341	0.86100	0.12127	1.0000
Si	Si56	1.0	0.52634	0.47244	0.12629	1.0000
Si	Si57	1.0	0.85111	0.14150	0.62729	1.0000
Si	Si58	1.0	0.47400	0.53205	0.62861	1.0000
Si	Si59	1.0	0.16208	0.13834	0.37704	1.0000
Si	Si60	1.0	0.52815	0.52597	0.37547	1.0000
Si	Si61	1.0	0.86395	0.84370	0.87346	1.0000
Si	Si62	1.0	0.47500	0.45942	0.87639	1.0000
Si	Si63	1.0	0.66060	0.19538	0.54966	1.0000

RAI-T9-T1XT5YT5XT1Y

data_image0

_chemical_formula_structural H4O128Si63

_chemical_formula_sum "H4 O128 Si63"

_cell_length_a 12.4927

_cell_length_b 12.4932

_cell_length_c 26.505

_cell_angle_alpha 90.3746

_cell_angle_beta 90.4357

_cell_angle_gamma 90.7811

_space_group_name_H-M_alt "P 1"

_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz

'x, y, z'

loop_

_atom_site_type_symbol

_atom_site_label

_atom_site_symmetry_multiplicity

_atom_site_fract_x

_atom_site_fract_y

_atom_site_fract_z

_atom_site_occupancy

H H1 1.0 0.93381 0.04264 0.64382 1.0000

H H2 1.0 0.85108 0.16978 0.68335 1.0000

H H3 1.0 0.76506 0.17345 0.61827 1.0000

H H4 1.0 0.88580 0.11793 0.57650 1.0000

O O1 1.0 0.31563 0.65699 0.06143 1.0000

O O2 1.0 0.35504 0.82355 0.00131 1.0000

O O3 1.0 0.22599 0.84265 0.07912 1.0000

O O4 1.0 0.43693 0.82173 0.09215 1.0000

:

O	O5	1.0	0.34817	0.50711	0.99105	1.0000
O	O6	1.0	0.23062	0.46366	0.07147	1.0000
O	O7	1.0	0.44257	0.49133	0.07935	1.0000
O	O8	1.0	0.70762	0.67443	0.06901	1.0000
O	O9	1.0	0.83152	0.84457	0.05564	1.0000
O	O10	1.0	0.64441	0.86532	0.09920	1.0000
O	O11	1.0	0.83256	0.50258	0.05787	1.0000
O	O12	1.0	0.64818	0.48710	0.10424	1.0000
O	O13	1.0	0.95889	0.67292	0.05476	1.0000
O	O14	1.0	0.01833	0.85132	0.10128	1.0000
O	O15	1.0	0.02690	0.49432	0.09709	1.0000
O	O16	1.0	0.67331	0.32898	0.56092	1.0000
O	O17	1.0	0.67364	0.16839	0.49215	1.0000
O	O18	1.0	0.75664	0.14265	0.58334	1.0000
O	O19	1.0	0.54418	0.16081	0.56906	1.0000
O	O20	1.0	0.65921	0.49635	0.50092	1.0000
O	O21	1.0	0.77141	0.51022	0.58593	1.0000
O	O22	1.0	0.55936	0.49752	0.58795	1.0000
O	O23	1.0	0.32447	0.32774	0.56536	1.0000
O	O24	1.0	0.16080	0.18182	0.56575	1.0000
O	O25	1.0	0.34958	0.13676	0.60297	1.0000
O	O26	1.0	0.16550	0.46218	0.56602	1.0000
O	O27	1.0	0.35227	0.52762	0.59935	1.0000
O	O28	1.0	0.00176	0.31945	0.55939	1.0000
O	O29	1.0	0.96454	0.11259	0.58342	1.0000
O	O30	1.0	0.98143	0.50887	0.60316	1.0000
O	O31	1.0	0.33345	0.36636	0.31485	1.0000
O	O32	1.0	0.17698	0.34617	0.24602	1.0000
O	O33	1.0	0.18329	0.21498	0.32387	1.0000
O	O34	1.0	0.13483	0.42018	0.33727	1.0000
O	O35	1.0	0.48618	0.34513	0.24543	1.0000
O	O36	1.0	0.49360	0.23044	0.32878	1.0000
O	O37	1.0	0.52961	0.44145	0.33091	1.0000
O	O38	1.0	0.32706	0.70335	0.31533	1.0000

O	O39	1.0	0.15511	0.82421	0.30384	1.0000
O	O40	1.0	0.13676	0.63414	0.34304	1.0000
O	O41	1.0	0.49484	0.83512	0.31470	1.0000
O	O42	1.0	0.50719	0.64557	0.35739	1.0000
O	O43	1.0	0.32260	0.95894	0.30716	1.0000
O	O44	1.0	0.13567	0.01392	0.34582	1.0000
O	O45	1.0	0.49934	0.02743	0.35370	1.0000
O	O46	1.0	0.66878	0.69160	0.81276	1.0000
O	O47	1.0	0.83507	0.66346	0.75057	1.0000
O	O48	1.0	0.85967	0.76922	0.83581	1.0000
O	O49	1.0	0.82481	0.55663	0.83420	1.0000
O	O50	1.0	0.50960	0.67058	0.74760	1.0000
O	O51	1.0	0.47165	0.73554	0.84223	1.0000
O	O52	1.0	0.51871	0.53623	0.82432	1.0000
O	O53	1.0	0.65558	0.28493	0.81578	1.0000
O	O54	1.0	0.83065	0.16435	0.81350	1.0000
O	O55	1.0	0.83774	0.35326	0.85850	1.0000
O	O56	1.0	0.48720	0.15107	0.81453	1.0000
O	O57	1.0	0.46729	0.34164	0.85192	1.0000
O	O58	1.0	0.66252	0.03475	0.82497	1.0000
O	O59	1.0	0.85028	0.97784	0.85874	1.0000
O	O60	1.0	0.47303	0.94365	0.82913	1.0000
O	O61	1.0	0.64763	0.66599	0.93215	1.0000
O	O62	1.0	0.65140	0.82157	0.00127	1.0000
O	O63	1.0	0.78661	0.82908	0.92539	1.0000
O	O64	1.0	0.57962	0.85940	0.90809	1.0000
O	O65	1.0	0.64976	0.51957	0.00570	1.0000
O	O66	1.0	0.77396	0.49649	0.92700	1.0000
O	O67	1.0	0.56180	0.47338	0.91808	1.0000
O	O68	1.0	0.29976	0.67434	0.93420	1.0000
O	O69	1.0	0.17848	0.84460	0.94498	1.0000
O	O70	1.0	0.36723	0.86490	0.90411	1.0000
O	O71	1.0	0.16967	0.50455	0.93534	1.0000
O	O72	1.0	0.35813	0.49666	0.89073	1.0000

O	O73	1.0	0.04417	0.67465	0.94220	1.0000
O	O74	1.0	0.99101	0.85977	0.90222	1.0000
O	O75	1.0	0.97549	0.49322	0.89843	1.0000
O	O76	1.0	0.30501	0.32812	0.43913	1.0000
O	O77	1.0	0.32404	0.16257	0.50296	1.0000
O	O78	1.0	0.23616	0.13490	0.41339	1.0000
O	O79	1.0	0.44606	0.17377	0.42290	1.0000
O	O80	1.0	0.32788	0.49293	0.50193	1.0000
O	O81	1.0	0.23820	0.52024	0.41242	1.0000
O	O82	1.0	0.44604	0.48663	0.42017	1.0000
O	O83	1.0	0.70714	0.33958	0.43594	1.0000
O	O84	1.0	0.83951	0.17171	0.43115	1.0000
O	O85	1.0	0.64504	0.15854	0.39235	1.0000
O	O86	1.0	0.83606	0.50887	0.44566	1.0000
O	O87	1.0	0.64938	0.53050	0.40294	1.0000
O	O88	1.0	0.96686	0.34085	0.43860	1.0000
O	O89	1.0	0.03023	0.16765	0.39025	1.0000
O	O90	1.0	0.02530	0.52975	0.40590	1.0000
O	O91	1.0	0.65560	0.36944	0.69330	1.0000
O	O92	1.0	0.81963	0.34073	0.75876	1.0000
O	O93	1.0	0.79535	0.22254	0.67432	1.0000
O	O94	1.0	0.85144	0.43244	0.67210	1.0000
O	O95	1.0	0.49196	0.31812	0.75275	1.0000
O	O96	1.0	0.50097	0.23513	0.66091	1.0000
O	O97	1.0	0.46450	0.44363	0.67425	1.0000
O	O98	1.0	0.67791	0.70168	0.68682	1.0000
O	O99	1.0	0.85110	0.83346	0.69048	1.0000
O	O100	1.0	0.86512	0.64150	0.65245	1.0000
O	O101	1.0	0.52269	0.84201	0.68864	1.0000
O	O102	1.0	0.48736	0.64979	0.64931	1.0000
O	O103	1.0	0.69582	0.97149	0.67686	1.0000
O	O104	1.0	0.50354	0.02578	0.64389	1.0000
O	O105	1.0	0.34528	0.69309	0.18664	1.0000
O	O106	1.0	0.18029	0.64872	0.24682	1.0000

O	O107	1.0	0.15517	0.77167	0.16753	1.0000
O	O108	1.0	0.18716	0.56149	0.15719	1.0000
O	O109	1.0	0.49398	0.65863	0.25741	1.0000
O	O110	1.0	0.54242	0.76714	0.17464	1.0000
O	O111	1.0	0.50420	0.55678	0.17076	1.0000
O	O112	1.0	0.32963	0.29508	0.18095	1.0000
O	O113	1.0	0.15942	0.16831	0.19026	1.0000
O	O114	1.0	0.14010	0.35574	0.14723	1.0000
O	O115	1.0	0.49924	0.16719	0.19095	1.0000
O	O116	1.0	0.51819	0.35238	0.14655	1.0000
O	O117	1.0	0.32921	0.03896	0.19378	1.0000
O	O118	1.0	0.15155	0.98012	0.14678	1.0000
O	O119	1.0	0.51171	0.97324	0.15450	1.0000
O	O120	1.0	0.00732	0.84404	0.00140	1.0000
O	O121	1.0	0.00325	0.50363	0.99786	1.0000
O	O122	1.0	0.01716	0.16721	0.48973	1.0000
O	O123	1.0	0.00617	0.49765	0.50414	1.0000
O	O124	1.0	0.15557	0.99539	0.24676	1.0000
O	O125	1.0	0.49609	0.00201	0.25358	1.0000
O	O126	1.0	0.81443	0.98148	0.76059	1.0000
O	O127	1.0	0.54310	0.02107	0.74168	1.0000
O	O128	1.0	0.90270	0.04195	0.67791	1.0000
Si	Si1	1.0	0.33395	0.78617	0.05897	1.0000
Si	Si2	1.0	0.33480	0.52983	0.05114	1.0000
Si	Si3	1.0	0.70868	0.80125	0.05590	1.0000
Si	Si4	1.0	0.71073	0.54626	0.05888	1.0000
Si	Si5	1.0	0.95350	0.80241	0.05322	1.0000
Si	Si6	1.0	0.95569	0.54346	0.05168	1.0000
Si	Si7	1.0	0.53334	0.85661	0.13028	1.0000
Si	Si8	1.0	0.66168	0.20082	0.55098	1.0000
Si	Si9	1.0	0.66546	0.45832	0.55932	1.0000
Si	Si10	1.0	0.28821	0.20242	0.55887	1.0000
Si	Si11	1.0	0.29234	0.45250	0.55763	1.0000
Si	Si12	1.0	0.03630	0.19501	0.54959	1.0000

Si	Si13	1.0	0.03871	0.44533	0.55786	1.0000
Si	Si14	1.0	0.47515	0.14076	0.61996	1.0000
Si	Si15	1.0	0.20702	0.33696	0.30558	1.0000
Si	Si16	1.0	0.46040	0.34504	0.30515	1.0000
Si	Si17	1.0	0.20051	0.70354	0.30198	1.0000
Si	Si18	1.0	0.45598	0.71093	0.31081	1.0000
Si	Si19	1.0	0.19340	0.94823	0.30083	1.0000
Si	Si20	1.0	0.45245	0.95617	0.30707	1.0000
Si	Si21	1.0	0.13536	0.52441	0.37463	1.0000
Si	Si22	1.0	0.79691	0.67001	0.80873	1.0000
Si	Si23	1.0	0.54260	0.65834	0.80656	1.0000
Si	Si24	1.0	0.78513	0.28568	0.81188	1.0000
Si	Si25	1.0	0.52647	0.27450	0.80811	1.0000
Si	Si26	1.0	0.78987	0.04031	0.81383	1.0000
Si	Si27	1.0	0.54167	0.03701	0.80227	1.0000
Si	Si28	1.0	0.85288	0.47498	0.87955	1.0000
Si	Si29	1.0	0.66591	0.79419	0.94166	1.0000
Si	Si30	1.0	0.65836	0.53930	0.94556	1.0000
Si	Si31	1.0	0.29973	0.80134	0.94637	1.0000
Si	Si32	1.0	0.29358	0.54533	0.93814	1.0000
Si	Si33	1.0	0.05530	0.80402	0.94799	1.0000
Si	Si34	1.0	0.04804	0.54474	0.94371	1.0000
Si	Si35	1.0	0.47456	0.85073	0.87121	1.0000
Si	Si36	1.0	0.32828	0.20034	0.44463	1.0000
Si	Si37	1.0	0.32979	0.45651	0.44307	1.0000
Si	Si38	1.0	0.71673	0.21028	0.43789	1.0000
Si	Si39	1.0	0.71294	0.46768	0.44678	1.0000
Si	Si40	1.0	0.96318	0.21147	0.43791	1.0000
Si	Si41	1.0	0.95810	0.46819	0.44875	1.0000
Si	Si42	1.0	0.52068	0.14816	0.37435	1.0000
Si	Si43	1.0	0.78146	0.34119	0.70004	1.0000
Si	Si44	1.0	0.52806	0.34024	0.69512	1.0000
Si	Si45	1.0	0.80652	0.71109	0.69527	1.0000
Si	Si46	1.0	0.54988	0.71615	0.69340	1.0000

Si	Si47	1.0	0.56757	0.96437	0.68792	1.0000
Si	Si48	1.0	0.86521	0.52204	0.62842	1.0000
Si	Si49	1.0	0.21700	0.66813	0.18905	1.0000
Si	Si50	1.0	0.47148	0.66842	0.19720	1.0000
Si	Si51	1.0	0.20175	0.29143	0.19141	1.0000
Si	Si52	1.0	0.45762	0.28937	0.19135	1.0000
Si	Si53	1.0	0.19975	0.04602	0.19465	1.0000
Si	Si54	1.0	0.45851	0.04479	0.19847	1.0000
Si	Si55	1.0	0.14604	0.46930	0.11803	1.0000
Si	Si56	1.0	0.13896	0.86053	0.12368	1.0000
Si	Si57	1.0	0.52727	0.47315	0.12512	1.0000
Si	Si58	1.0	0.46726	0.52915	0.62799	1.0000
Si	Si59	1.0	0.14613	0.13426	0.36881	1.0000
Si	Si60	1.0	0.53106	0.52621	0.37774	1.0000
Si	Si61	1.0	0.86994	0.85875	0.88035	1.0000
Si	Si62	1.0	0.47630	0.46432	0.87166	1.0000
Si	Si63	1.0	0.81574	0.95622	0.70054	1.0000

RAI-T7T7T7T7T9T9

data_image0
_chemical_formula_structural H24O128Si58
_chemical_formula_sum "H24 O128 Si58"
_cell_length_a 12.6165
_cell_length_b 12.6093
_cell_length_c 25.0294
_cell_angle_alpha 89.9036
_cell_angle_beta 90.0713
_cell_angle_gamma 89.5884

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_
_space_group_symop_operation_xyz
'x, y, z'

loop_
_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H H1 1.0 0.97016 0.57834 0.62802 1.0000
H H2 1.0 0.82149 0.63319 0.61163 1.0000
H H3 1.0 0.76908 0.48613 0.62550 1.0000
H H4 1.0 0.89907 0.45644 0.66608 1.0000
H H5 1.0 0.54618 0.09990 0.58254 1.0000
H H6 1.0 0.42177 0.03283 0.61968 1.0000
H H7 1.0 0.36843 0.18093 0.63667 1.0000
H H8 1.0 0.51667 0.23090 0.62307 1.0000
:

H	H9	1.0	0.93062	0.02771	0.62664	1.0000
H	H10	1.0	0.79141	0.08092	0.58976	1.0000
H	H11	1.0	0.81910	0.21041	0.63342	1.0000
H	H12	1.0	0.97017	0.17765	0.64294	1.0000
H	H13	1.0	0.02713	0.93158	0.12007	1.0000
H	H14	1.0	0.17681	0.97213	0.10401	1.0000
H	H15	1.0	0.20996	0.82115	0.11361	1.0000
H	H16	1.0	0.08065	0.79290	0.15691	1.0000
H	H17	1.0	0.57766	0.97058	0.11968	1.0000
H	H18	1.0	0.63300	0.82256	0.13620	1.0000
H	H19	1.0	0.48517	0.77003	0.12238	1.0000
H	H20	1.0	0.45594	0.89923	0.08137	1.0000
H	H21	1.0	0.03103	0.42298	0.12809	1.0000
H	H22	1.0	0.17991	0.37019	0.11137	1.0000
H	H23	1.0	0.22940	0.51799	0.12463	1.0000
H	H24	1.0	0.09786	0.54761	0.16502	1.0000
O	O1	1.0	0.30841	0.67016	0.05428	1.0000
O	O2	1.0	0.31372	0.83249	0.98442	1.0000
O	O3	1.0	0.32128	0.49845	0.99212	1.0000
O	O4	1.0	0.45585	0.52323	0.07220	1.0000
O	O5	1.0	0.70040	0.68062	0.06893	1.0000
O	O6	1.0	0.83659	0.83429	0.04630	1.0000
O	O7	1.0	0.83219	0.51487	0.06311	1.0000
O	O8	1.0	0.64734	0.49777	0.11247	1.0000
O	O9	1.0	0.96374	0.67623	0.07992	1.0000
O	O10	1.0	0.68877	0.33393	0.55418	1.0000
O	O11	1.0	0.68784	0.17057	0.48515	1.0000
O	O12	1.0	0.68182	0.50583	0.49184	1.0000
O	O13	1.0	0.54448	0.48361	0.57089	1.0000
O	O14	1.0	0.29843	0.32158	0.56835	1.0000
O	O15	1.0	0.16476	0.16495	0.54638	1.0000
O	O16	1.0	0.16800	0.48846	0.56338	1.0000
O	O17	1.0	0.35359	0.50341	0.61217	1.0000
O	O18	1.0	0.03828	0.32554	0.57879	1.0000

:

O	O19	1.0	0.32618	0.37044	0.30729	1.0000
O	O20	1.0	0.15818	0.35429	0.24304	1.0000
O	O21	1.0	0.15394	0.27220	0.34208	1.0000
O	O22	1.0	0.14474	0.47695	0.32735	1.0000
O	O23	1.0	0.48810	0.34497	0.24018	1.0000
O	O24	1.0	0.50244	0.27032	0.33786	1.0000
O	O25	1.0	0.50587	0.47648	0.32129	1.0000
O	O26	1.0	0.33975	0.72317	0.32015	1.0000
O	O27	1.0	0.17826	0.85990	0.32491	1.0000
O	O28	1.0	0.16074	0.67018	0.36759	1.0000
O	O29	1.0	0.50026	0.85812	0.31583	1.0000
O	O30	1.0	0.52393	0.66921	0.36151	1.0000
O	O31	1.0	0.33683	0.99233	0.30099	1.0000
O	O32	1.0	0.14921	0.06496	0.33079	1.0000
O	O33	1.0	0.52716	0.06315	0.32421	1.0000
O	O34	1.0	0.67369	0.63295	0.80788	1.0000
O	O35	1.0	0.84155	0.64944	0.74365	1.0000
O	O36	1.0	0.84680	0.73017	0.84267	1.0000
O	O37	1.0	0.85482	0.52558	0.82777	1.0000
O	O38	1.0	0.51214	0.65717	0.74012	1.0000
O	O39	1.0	0.49614	0.73165	0.83768	1.0000
O	O40	1.0	0.49425	0.52560	0.82108	1.0000
O	O41	1.0	0.66078	0.27875	0.82092	1.0000
O	O42	1.0	0.82271	0.14248	0.82494	1.0000
O	O43	1.0	0.84017	0.33173	0.86820	1.0000
O	O44	1.0	0.50012	0.14441	0.81513	1.0000
O	O45	1.0	0.47581	0.33268	0.86113	1.0000
O	O46	1.0	0.66415	0.01058	0.80068	1.0000
O	O47	1.0	0.47394	0.93925	0.82365	1.0000
O	O48	1.0	0.63872	0.67568	0.93875	1.0000
O	O49	1.0	0.64814	0.84240	0.00445	1.0000
O	O50	1.0	0.73008	0.85373	0.90597	1.0000
O	O51	1.0	0.52519	0.85435	0.92012	1.0000
O	O52	1.0	0.65462	0.51499	0.00749	1.0000

O	O53	1.0	0.73389	0.49489	0.91107	1.0000
O	O54	1.0	0.52714	0.49829	0.92495	1.0000
O	O55	1.0	0.28070	0.66051	0.92675	1.0000
O	O56	1.0	0.14269	0.82128	0.92221	1.0000
O	O57	1.0	0.33212	0.83967	0.87901	1.0000
O	O58	1.0	0.14549	0.50067	0.93315	1.0000
O	O59	1.0	0.33308	0.47428	0.88722	1.0000
O	O60	1.0	0.00953	0.66354	0.94626	1.0000
O	O61	1.0	0.93784	0.85173	0.91627	1.0000
O	O62	1.0	0.94158	0.47204	0.92338	1.0000
O	O63	1.0	0.36300	0.32631	0.43917	1.0000
O	O64	1.0	0.35371	0.15971	0.50512	1.0000
O	O65	1.0	0.26984	0.14957	0.40670	1.0000
O	O66	1.0	0.47508	0.14708	0.42053	1.0000
O	O67	1.0	0.34448	0.48752	0.50707	1.0000
O	O68	1.0	0.26854	0.50672	0.40976	1.0000
O	O69	1.0	0.47474	0.50319	0.42545	1.0000
O	O70	1.0	0.72103	0.34272	0.42745	1.0000
O	O71	1.0	0.85764	0.18123	0.42233	1.0000
O	O72	1.0	0.66773	0.16428	0.37960	1.0000
O	O73	1.0	0.85642	0.50291	0.43219	1.0000
O	O74	1.0	0.66791	0.52809	0.38681	1.0000
O	O75	1.0	0.99063	0.33908	0.44628	1.0000
O	O76	1.0	0.06214	0.15143	0.41569	1.0000
O	O77	1.0	0.06124	0.52971	0.42372	1.0000
O	O78	1.0	0.66882	0.31105	0.69302	1.0000
O	O79	1.0	0.83152	0.31390	0.76279	1.0000
O	O80	1.0	0.49832	0.32011	0.75601	1.0000
O	O81	1.0	0.51945	0.45666	0.67614	1.0000
O	O82	1.0	0.67930	0.69974	0.67922	1.0000
O	O83	1.0	0.83231	0.83716	0.70090	1.0000
O	O84	1.0	0.51477	0.83350	0.68371	1.0000
O	O85	1.0	0.49673	0.64808	0.63511	1.0000
O	O86	1.0	0.67553	0.96590	0.66716	1.0000

O	O87	1.0	0.33255	0.68880	0.19320	1.0000
O	O88	1.0	0.16851	0.68981	0.26202	1.0000
O	O89	1.0	0.50326	0.68363	0.25626	1.0000
O	O90	1.0	0.48404	0.54566	0.17743	1.0000
O	O91	1.0	0.32064	0.30034	0.17985	1.0000
O	O92	1.0	0.16450	0.16585	0.20098	1.0000
O	O93	1.0	0.48718	0.16910	0.18340	1.0000
O	O94	1.0	0.50161	0.35533	0.13505	1.0000
O	O95	1.0	0.32461	0.03879	0.16846	1.0000
O	O96	1.0	0.03106	0.82675	0.01213	1.0000
O	O97	1.0	0.02324	0.51106	0.01955	1.0000
O	O98	1.0	0.97085	0.17476	0.51186	1.0000
O	O99	1.0	0.97716	0.49169	0.51933	1.0000
O	O100	1.0	0.17316	0.97173	0.23511	1.0000
O	O101	1.0	0.49033	0.97893	0.22852	1.0000
O	O102	1.0	0.82711	0.03168	0.73473	1.0000
O	O103	1.0	0.51063	0.02396	0.72803	1.0000
O	O104	1.0	0.85201	0.93735	0.83034	1.0000
O	O105	1.0	0.49513	0.00316	0.62065	1.0000
O	O106	1.0	0.86129	0.99065	0.62820	1.0000
O	O107	1.0	0.74940	0.52246	0.59095	1.0000
O	O108	1.0	0.99841	0.50459	0.62668	1.0000
O	O109	1.0	0.82520	0.44424	0.67890	1.0000
O	O110	1.0	0.86872	0.67221	0.63660	1.0000
O	O111	1.0	0.56024	0.17388	0.56993	1.0000
O	O112	1.0	0.32894	0.13326	0.61206	1.0000
O	O113	1.0	0.47947	0.25191	0.65699	1.0000
O	O114	1.0	0.77239	0.15643	0.58302	1.0000
O	O115	1.0	0.01233	0.13366	0.61729	1.0000
O	O116	1.0	0.85851	0.23509	0.66628	1.0000
O	O117	1.0	0.23451	0.86062	0.08073	1.0000
O	O118	1.0	0.99065	0.86191	0.11860	1.0000
O	O119	1.0	0.15604	0.77381	0.16398	1.0000
O	O120	1.0	0.13271	0.01403	0.12972	1.0000

O	O121	1.0	0.44344	0.82537	0.06856	1.0000
O	O122	1.0	0.67216	0.86984	0.11131	1.0000
O	O123	1.0	0.52112	0.75088	0.15706	1.0000
O	O124	1.0	0.50376	0.99838	0.12100	1.0000
O	O125	1.0	0.25129	0.48062	0.09088	1.0000
O	O126	1.0	0.00100	0.49621	0.12691	1.0000
O	O127	1.0	0.17183	0.56148	0.17760	1.0000
O	O128	1.0	0.13223	0.33085	0.13603	1.0000
Si	Si1	1.0	0.33431	0.54327	0.05237	1.0000
Si	Si2	1.0	0.71329	0.80663	0.05779	1.0000
Si	Si3	1.0	0.70925	0.55296	0.06290	1.0000
Si	Si4	1.0	0.95629	0.80122	0.06382	1.0000
Si	Si5	1.0	0.95504	0.54884	0.07171	1.0000
Si	Si6	1.0	0.67665	0.20684	0.54700	1.0000
Si	Si7	1.0	0.66614	0.46148	0.55204	1.0000
Si	Si8	1.0	0.28742	0.19517	0.55807	1.0000
Si	Si9	1.0	0.29060	0.44943	0.56264	1.0000
Si	Si10	1.0	0.04569	0.20020	0.56366	1.0000
Si	Si11	1.0	0.04535	0.45323	0.57159	1.0000
Si	Si12	1.0	0.19710	0.36766	0.30462	1.0000
Si	Si13	1.0	0.45457	0.36543	0.30160	1.0000
Si	Si14	1.0	0.21208	0.73624	0.31856	1.0000
Si	Si15	1.0	0.46679	0.73401	0.31319	1.0000
Si	Si16	1.0	0.20951	0.97251	0.29781	1.0000
Si	Si17	1.0	0.46327	0.97274	0.29228	1.0000
Si	Si18	1.0	0.15820	0.54465	0.38249	1.0000
Si	Si19	1.0	0.80282	0.63527	0.80515	1.0000
Si	Si20	1.0	0.54525	0.63707	0.80171	1.0000
Si	Si21	1.0	0.78857	0.26626	0.81905	1.0000
Si	Si22	1.0	0.53388	0.26853	0.81303	1.0000
Si	Si23	1.0	0.53769	0.02998	0.79184	1.0000
Si	Si24	1.0	0.84317	0.45724	0.88290	1.0000
Si	Si25	1.0	0.63608	0.80492	0.94263	1.0000
Si	Si26	1.0	0.63872	0.54717	0.94544	1.0000

Si	Si27	1.0	0.26669	0.78826	0.92830	1.0000
Si	Si28	1.0	0.26963	0.53369	0.93510	1.0000
Si	Si29	1.0	0.03011	0.79083	0.94934	1.0000
Si	Si30	1.0	0.03035	0.53735	0.95568	1.0000
Si	Si31	1.0	0.45785	0.84193	0.86472	1.0000
Si	Si32	1.0	0.36474	0.19718	0.44318	1.0000
Si	Si33	1.0	0.36253	0.45479	0.44534	1.0000
Si	Si34	1.0	0.73404	0.21493	0.42872	1.0000
Si	Si35	1.0	0.73235	0.46970	0.43485	1.0000
Si	Si36	1.0	0.97057	0.21173	0.44922	1.0000
Si	Si37	1.0	0.97095	0.46540	0.45552	1.0000
Si	Si38	1.0	0.54204	0.16061	0.36517	1.0000
Si	Si39	1.0	0.54166	0.33508	0.69559	1.0000
Si	Si40	1.0	0.80528	0.71350	0.69003	1.0000
Si	Si41	1.0	0.55169	0.71027	0.68463	1.0000
Si	Si42	1.0	0.54833	0.95657	0.67557	1.0000
Si	Si43	1.0	0.46019	0.66732	0.19588	1.0000
Si	Si44	1.0	0.19425	0.28889	0.18989	1.0000
Si	Si45	1.0	0.44852	0.29183	0.18469	1.0000
Si	Si46	1.0	0.45222	0.04615	0.17586	1.0000
Si	Si47	1.0	0.52177	0.48090	0.12426	1.0000
Si	Si48	1.0	0.47900	0.52247	0.62361	1.0000
Si	Si49	1.0	0.15943	0.16019	0.37381	1.0000
Si	Si50	1.0	0.54226	0.54354	0.37381	1.0000
Si	Si51	1.0	0.45838	0.45831	0.87368	1.0000
Si	Si52	1.0	0.79608	0.32528	0.70082	1.0000
Si	Si53	1.0	0.32446	0.79730	0.04646	1.0000
Si	Si54	1.0	0.20538	0.67800	0.20030	1.0000
Si	Si55	1.0	0.79150	0.03034	0.79756	1.0000
Si	Si56	1.0	0.84118	0.84261	0.87384	1.0000
Si	Si57	1.0	0.19925	0.04677	0.18342	1.0000
Si	Si58	1.0	0.80055	0.95706	0.68309	1.0000

RAI-T1T1T7T7T7T9T9

data_image0
_chemical_formula_structural H32O128Si56
_chemical_formula_sum "H32 O128 Si56"
_cell_length_a 12.5316
_cell_length_b 12.5105
_cell_length_c 25.3677
_cell_angle_alpha 90.0341
_cell_angle_beta 89.9181
_cell_angle_gamma 89.3467

_space_group_name_H-M_alt "P 1"
_space_group_IT_number 1

loop_

_space_group_symop_operation_xyz
'x, y, z'

loop_

_atom_site_type_symbol
_atom_site_label
_atom_site_symmetry_multiplicity
_atom_site_fract_x
_atom_site_fract_y
_atom_site_fract_z
_atom_site_occupancy

H H1 1.0 0.02654 0.93682 0.11622 1.0000
H H2 1.0 0.17795 0.96534 0.09960 1.0000
H H3 1.0 0.20047 0.81168 0.11253 1.0000
H H4 1.0 0.06944 0.78090 0.15738 1.0000
H H5 1.0 0.58840 0.97459 0.11726 1.0000
H H6 1.0 0.63553 0.82330 0.13706 1.0000
H H7 1.0 0.48608 0.78055 0.12629 1.0000
H H8 1.0 0.45635 0.90753 0.08262 1.0000

:

H	H9	1.0	0.03409	0.42381	0.12471	1.0000
H	H10	1.0	0.18269	0.36317	0.11126	1.0000
H	H11	1.0	0.23682	0.51130	0.12255	1.0000
H	H12	1.0	0.10584	0.54143	0.16177	1.0000
H	H13	1.0	0.96788	0.58387	0.62530	1.0000
H	H14	1.0	0.82027	0.64628	0.61124	1.0000
H	H15	1.0	0.76351	0.49847	0.62304	1.0000
H	H16	1.0	0.89324	0.46693	0.66203	1.0000
H	H17	1.0	0.54724	0.09788	0.58300	1.0000
H	H18	1.0	0.41347	0.03333	0.61759	1.0000
H	H19	1.0	0.36715	0.18520	0.63704	1.0000
H	H20	1.0	0.51666	0.22566	0.62684	1.0000
H	H21	1.0	0.92870	0.02881	0.62048	1.0000
H	H22	1.0	0.79728	0.09066	0.58774	1.0000
H	H23	1.0	0.82820	0.22158	0.63394	1.0000
H	H24	1.0	0.97775	0.18077	0.64016	1.0000
H	H25	1.0	0.26285	0.02448	0.34249	1.0000
H	H26	1.0	0.15264	0.89931	0.34696	1.0000
H	H27	1.0	0.29164	0.97715	0.26739	1.0000
H	H28	1.0	0.13440	0.93579	0.24265	1.0000
H	H29	1.0	0.86560	0.07949	0.74033	1.0000
H	H30	1.0	0.85057	0.10848	0.84512	1.0000
H	H31	1.0	0.74029	0.98245	0.84206	1.0000
H	H32	1.0	0.71130	0.03040	0.76716	1.0000
O	O1	1.0	0.31651	0.66761	0.05521	1.0000
O	O2	1.0	0.32308	0.83510	0.98834	1.0000
O	O3	1.0	0.32897	0.49879	0.99116	1.0000
O	O4	1.0	0.46252	0.51813	0.07168	1.0000
O	O5	1.0	0.70040	0.67952	0.06689	1.0000
O	O6	1.0	0.83299	0.83647	0.04334	1.0000
O	O7	1.0	0.83797	0.51463	0.06245	1.0000
O	O8	1.0	0.65356	0.49765	0.11319	1.0000
O	O9	1.0	0.96495	0.68110	0.07799	1.0000
O	O10	1.0	0.68478	0.34111	0.55537	1.0000

O	O11	1.0	0.67918	0.17374	0.48863	1.0000
O	O12	1.0	0.67125	0.51030	0.49166	1.0000
O	O13	1.0	0.53845	0.48901	0.57270	1.0000
O	O14	1.0	0.29839	0.32796	0.56674	1.0000
O	O15	1.0	0.16857	0.16791	0.54402	1.0000
O	O16	1.0	0.16315	0.49434	0.56262	1.0000
O	O17	1.0	0.34706	0.50942	0.61358	1.0000
O	O18	1.0	0.03644	0.32727	0.57623	1.0000
O	O19	1.0	0.32106	0.35722	0.30920	1.0000
O	O20	1.0	0.15525	0.34693	0.24274	1.0000
O	O21	1.0	0.15654	0.23091	0.32989	1.0000
O	O22	1.0	0.13228	0.44460	0.33383	1.0000
O	O23	1.0	0.48457	0.35299	0.24257	1.0000
O	O24	1.0	0.50959	0.27793	0.33912	1.0000
O	O25	1.0	0.48824	0.48358	0.32498	1.0000
O	O26	1.0	0.33499	0.75260	0.31914	1.0000
O	O27	1.0	0.18124	0.64421	0.36353	1.0000
O	O28	1.0	0.51008	0.86531	0.31060	1.0000
O	O29	1.0	0.52094	0.68024	0.35862	1.0000
O	O30	1.0	0.53303	0.07157	0.31848	1.0000
O	O31	1.0	0.68139	0.65355	0.80958	1.0000
O	O32	1.0	0.84725	0.66178	0.74285	1.0000
O	O33	1.0	0.84912	0.77579	0.83065	1.0000
O	O34	1.0	0.86884	0.56168	0.83321	1.0000
O	O35	1.0	0.51778	0.65590	0.74332	1.0000
O	O36	1.0	0.49105	0.72805	0.84023	1.0000
O	O37	1.0	0.51582	0.52338	0.82506	1.0000
O	O38	1.0	0.66701	0.25487	0.81998	1.0000
O	O39	1.0	0.82264	0.36183	0.86383	1.0000
O	O40	1.0	0.49301	0.14074	0.81107	1.0000
O	O41	1.0	0.48022	0.32703	0.85873	1.0000
O	O42	1.0	0.47065	0.93386	0.81760	1.0000
O	O43	1.0	0.59517	0.67172	0.94912	1.0000
O	O44	1.0	0.63744	0.84447	0.00703	1.0000

O	O45	1.0	0.74981	0.79905	0.92095	1.0000
O	O46	1.0	0.54753	0.86766	0.91241	1.0000
O	O47	1.0	0.66046	0.50712	0.00877	1.0000
O	O48	1.0	0.74247	0.53322	0.91396	1.0000
O	O49	1.0	0.54029	0.47406	0.92669	1.0000
O	O50	1.0	0.29068	0.66546	0.92850	1.0000
O	O51	1.0	0.15213	0.82875	0.92595	1.0000
O	O52	1.0	0.34229	0.85020	0.88507	1.0000
O	O53	1.0	0.15346	0.50588	0.93203	1.0000
O	O54	1.0	0.34459	0.47921	0.88714	1.0000
O	O55	1.0	0.01504	0.67025	0.94411	1.0000
O	O56	1.0	0.94932	0.86281	0.91358	1.0000
O	O57	1.0	0.94710	0.47656	0.92217	1.0000
O	O58	1.0	0.40693	0.33583	0.44910	1.0000
O	O59	1.0	0.36442	0.16355	0.50731	1.0000
O	O60	1.0	0.25159	0.20879	0.42156	1.0000
O	O61	1.0	0.45380	0.14004	0.41241	1.0000
O	O62	1.0	0.34152	0.50009	0.50910	1.0000
O	O63	1.0	0.25810	0.47319	0.41474	1.0000
O	O64	1.0	0.46031	0.53358	0.42645	1.0000
O	O65	1.0	0.71087	0.34374	0.42902	1.0000
O	O66	1.0	0.84959	0.18066	0.42573	1.0000
O	O67	1.0	0.65916	0.15925	0.38542	1.0000
O	O68	1.0	0.84765	0.50346	0.43267	1.0000
O	O69	1.0	0.65716	0.52960	0.38763	1.0000
O	O70	1.0	0.98600	0.33910	0.44475	1.0000
O	O71	1.0	0.05204	0.14731	0.41219	1.0000
O	O72	1.0	0.05402	0.53247	0.42218	1.0000
O	O73	1.0	0.66965	0.31312	0.68782	1.0000
O	O74	1.0	0.82465	0.33151	0.76084	1.0000
O	O75	1.0	0.50885	0.32215	0.75655	1.0000
O	O76	1.0	0.51271	0.45635	0.67669	1.0000
O	O77	1.0	0.68043	0.70560	0.68052	1.0000
O	O78	1.0	0.83196	0.84971	0.69920	1.0000

O	O79	1.0	0.51061	0.83403	0.68680	1.0000
O	O80	1.0	0.49444	0.64998	0.63936	1.0000
O	O81	1.0	0.66854	0.96488	0.65986	1.0000
O	O82	1.0	0.33121	0.69504	0.18852	1.0000
O	O83	1.0	0.17467	0.67894	0.26083	1.0000
O	O84	1.0	0.49314	0.68348	0.25625	1.0000
O	O85	1.0	0.48621	0.55105	0.17553	1.0000
O	O86	1.0	0.32177	0.30027	0.18071	1.0000
O	O87	1.0	0.16740	0.15895	0.19879	1.0000
O	O88	1.0	0.49314	0.17380	0.18681	1.0000
O	O89	1.0	0.50610	0.35722	0.13839	1.0000
O	O90	1.0	0.33440	0.04271	0.16204	1.0000
O	O91	1.0	0.02979	0.83342	0.01096	1.0000
O	O92	1.0	0.02889	0.51758	0.01693	1.0000
O	O93	1.0	0.97333	0.17329	0.51007	1.0000
O	O94	1.0	0.97233	0.49285	0.51725	1.0000
O	O95	1.0	0.49953	0.97927	0.22327	1.0000
O	O96	1.0	0.50509	0.02865	0.72293	1.0000
O	O97	1.0	0.22649	0.85151	0.08051	1.0000
O	O98	1.0	0.98541	0.86960	0.11552	1.0000
O	O99	1.0	0.14540	0.76457	0.16366	1.0000
O	O100	1.0	0.13898	0.01730	0.12330	1.0000
O	O101	1.0	0.44080	0.83119	0.07475	1.0000
O	O102	1.0	0.67531	0.86935	0.11187	1.0000
O	O103	1.0	0.52411	0.75820	0.15969	1.0000
O	O104	1.0	0.51696	0.01052	0.11780	1.0000
O	O105	1.0	0.25623	0.47533	0.08839	1.0000
O	O106	1.0	0.00968	0.49957	0.12293	1.0000
O	O107	1.0	0.17910	0.55362	0.17630	1.0000
O	O108	1.0	0.13353	0.32729	0.13623	1.0000
O	O109	1.0	0.48456	0.99660	0.61769	1.0000
O	O110	1.0	0.85874	0.99147	0.62134	1.0000
O	O111	1.0	0.74465	0.53384	0.58856	1.0000
O	O112	1.0	0.99139	0.50791	0.62324	1.0000

O	O113	1.0	0.81956	0.45609	0.67624	1.0000
O	O114	1.0	0.86918	0.68215	0.63629	1.0000
O	O115	1.0	0.56421	0.17421	0.57583	1.0000
O	O116	1.0	0.32682	0.13881	0.61216	1.0000
O	O117	1.0	0.47703	0.24935	0.65961	1.0000
O	O118	1.0	0.77986	0.16770	0.58212	1.0000
O	O119	1.0	0.01409	0.13368	0.61386	1.0000
O	O120	1.0	0.86693	0.24738	0.66630	1.0000
O	O121	1.0	0.13676	0.84003	0.32264	1.0000
O	O122	1.0	0.34396	0.00346	0.29424	1.0000
O	O123	1.0	0.19910	0.03191	0.36627	1.0000
O	O124	1.0	0.19954	0.95567	0.22432	1.0000
O	O125	1.0	0.86508	0.16753	0.82047	1.0000
O	O126	1.0	0.65945	0.00252	0.79378	1.0000
O	O127	1.0	0.80389	0.97571	0.86584	1.0000
O	O128	1.0	0.80143	0.05467	0.72271	1.0000
Si	Si1	1.0	0.34092	0.53950	0.05148	1.0000
Si	Si2	1.0	0.71034	0.80728	0.05739	1.0000
Si	Si3	1.0	0.71352	0.55066	0.06281	1.0000
Si	Si4	1.0	0.95400	0.80677	0.06149	1.0000
Si	Si5	1.0	0.96051	0.55271	0.06911	1.0000
Si	Si6	1.0	0.67654	0.21281	0.54959	1.0000
Si	Si7	1.0	0.66005	0.46921	0.55202	1.0000
Si	Si8	1.0	0.29081	0.19985	0.55770	1.0000
Si	Si9	1.0	0.28726	0.45706	0.56303	1.0000
Si	Si10	1.0	0.04768	0.20133	0.56082	1.0000
Si	Si11	1.0	0.04054	0.45611	0.56912	1.0000
Si	Si12	1.0	0.19191	0.34472	0.30440	1.0000
Si	Si13	1.0	0.44978	0.36776	0.30375	1.0000
Si	Si14	1.0	0.46331	0.74490	0.31098	1.0000
Si	Si15	1.0	0.47202	0.97944	0.28627	1.0000
Si	Si16	1.0	0.15683	0.52408	0.38337	1.0000
Si	Si17	1.0	0.81093	0.66338	0.80464	1.0000
Si	Si18	1.0	0.55291	0.64018	0.80432	1.0000

Si	Si19	1.0	0.53882	0.26168	0.81141	1.0000
Si	Si20	1.0	0.53142	0.02716	0.78606	1.0000
Si	Si21	1.0	0.84485	0.48290	0.88309	1.0000
Si	Si22	1.0	0.63194	0.79662	0.94715	1.0000
Si	Si23	1.0	0.63549	0.54705	0.94938	1.0000
Si	Si24	1.0	0.27624	0.79410	0.93211	1.0000
Si	Si25	1.0	0.27907	0.53721	0.93483	1.0000
Si	Si26	1.0	0.03566	0.79836	0.94894	1.0000
Si	Si27	1.0	0.03657	0.54301	0.95379	1.0000
Si	Si28	1.0	0.46439	0.84551	0.86385	1.0000
Si	Si29	1.0	0.36970	0.21109	0.44739	1.0000
Si	Si30	1.0	0.36571	0.46022	0.44958	1.0000
Si	Si31	1.0	0.72546	0.21524	0.43228	1.0000
Si	Si32	1.0	0.72213	0.47197	0.43545	1.0000
Si	Si33	1.0	0.96622	0.21070	0.44843	1.0000
Si	Si34	1.0	0.96457	0.46654	0.45424	1.0000
Si	Si35	1.0	0.53740	0.16181	0.36388	1.0000
Si	Si36	1.0	0.54198	0.33512	0.69537	1.0000
Si	Si37	1.0	0.80708	0.72336	0.68986	1.0000
Si	Si38	1.0	0.55190	0.71099	0.68790	1.0000
Si	Si39	1.0	0.54111	0.95605	0.67215	1.0000
Si	Si40	1.0	0.45905	0.67211	0.19515	1.0000
Si	Si41	1.0	0.19467	0.28470	0.18968	1.0000
Si	Si42	1.0	0.45041	0.29639	0.18752	1.0000
Si	Si43	1.0	0.46210	0.05150	0.17268	1.0000
Si	Si44	1.0	0.52681	0.48197	0.12472	1.0000
Si	Si45	1.0	0.47352	0.52525	0.62564	1.0000
Si	Si46	1.0	0.16566	0.15426	0.38193	1.0000
Si	Si47	1.0	0.53216	0.55481	0.37421	1.0000
Si	Si48	1.0	0.46966	0.45276	0.87411	1.0000
Si	Si49	1.0	0.79539	0.33587	0.69879	1.0000
Si	Si50	1.0	0.32650	0.79608	0.04918	1.0000
Si	Si51	1.0	0.20572	0.67270	0.19900	1.0000
Si	Si52	1.0	0.83728	0.85383	0.88219	1.0000

Si	Si53	1.0	0.20806	0.04439	0.17616	1.0000
Si	Si54	1.0	0.79400	0.96431	0.67555	1.0000
Si	Si55	1.0	0.79463	0.27735	0.81729	1.0000
Si	Si56	1.0	0.20730	0.73068	0.31765	1.0000