

**Table S1.**  $(\text{Na}_9\text{Cl})\text{Zn}_2(\text{PO}_4)_4$ . Atomic coordinates and equivalent isotropic displacement parameters ( $\text{\AA} \times 10^3$ ).  $U(\text{eq})$  is defined as one third of the trace of the orthogonalized  $U_{ij}$  tensor.

Atom	$x/a$	$y/b$	$z/c$	$U(\text{eq})$
Zn	0.29757(3)	0.92352(2)	0.17799(2)	0.00709(6)
Cl	0.5	0.0	0.5	0.01181(10)
P1	0.82692(7)	0.12466(4)	0.20034(4)	0.00463(7)
P2	0.37657(7)	0.59981(4)	0.24772(4)	0.00560(8)
Na1	-0.10655(12)	0.81416(7)	0.40323(7)	0.00911(12)
Na2	0.26671(12)	0.22743(7)	-0.01873(7)	0.00922(12)
Na3	0.0	0.5	0.5	0.01194(17)
Na4	-0.18345(12)	0.44183(7)	0.11932(8)	0.01215(13)
Na5	0.54123(13)	0.69817(7)	0.61839(8)	0.01465(14)
O1	0.8764(2)	0.16977(12)	0.05454(12)	0.0076 (2)
O2	0.9505(2)	0.97142(11)	0.22262(12)	0.0065(2)
O3	0.4838(2)	0.73908(12)	0.19445(13)	0.0088(2)
O4	0.5175(2)	0.10337(12)	0.17572(12)	0.0076(2)
O5	0.9441(2)	0.25085(12)	0.33979(12)	0.0092(2)
O6	0.5950(2)	0.56759(14)	0.38355(14)	0.0150(2)
O7	0.3256(2)	0.46270(12)	0.11369(13)	0.0135(2)
O8	0.1161(2)	0.63387(13)	0.29349(15)	0.0167(2)