Supplementary Information (SI) for Analytical Methods.

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## checkCIF (basic structural check) running

Checking for embedded fcf data in CIF ...

Found embedded fcf data in CIF. Extracting fcf data from uploaded CIF, please wait . .

### checkCIF/PLATON (basic structural check)

Structure factors have been supplied for datablock(s) Ghosalin\_auto

THIS REPORT IS FOR GUIDANCE ONLY. IF USED AS PART OF A REVIEW PROCEDURE FOR PUBLICATION, IT SHOULD NOT REPLACE THE EXPERTISE OF AN EXPERIENCED CRYSTALLOGRAPHIC REFEREE.

No syntax errors found. CIF dictionary

Please wait while processing......Interpreting this report

Structure factor report

# **Datablock: Ghosalin\_auto**

Bond precision:		C-C = 0.0058 A		Wavelength=1.54184	
Cell: a=8.7363(		5)	b=9.2403(8)	c=10.945	8(5)
		948(6)	beta=89.824(5)	gamma=72	.572(7)
Temperature: 293 K					
		Calculat	ed		Reported
Volume		834.03(1	.0)		834.03(10)
Space group	)	P -1			P -1
Hall group		-P 1			-P 1
Moiety form	nula	C17 H20	06		C17 H20 O6
Sum formula		C17 H20 O6			C17 H20 O6
Mr		320.33			320.33
Dx,g cm-3		1.276			1.276
Z		2			2
Mu (mm-1)		0.807			0.807
F000		340.0			340.0
F000'		341.17			
h,k,lmax		10,11,13	}		10,11,13
Nref		3305			3233
Tmin,Tmax		0.865,0.	908		0.744,1.000
Tmin'		0.865			
Correction method= # Reported T Limits: Tmin=0.744 Tmax=1.000 AbsCorr = MULTI-SCAN					
Data completeness= 0.978 Theta(max)= 72.400					
R(reflectio	ns)= 0.0854	( 2247)		wR2(reflections)= 0.2514( 3233)	
S = 1.186		Npar	= 212		

The following ALERTS were generated. Each ALERT has the format **test-name\_ALERT\_alert-type\_alert-level**.

Click on the hyperlinks for more details of the test.

### Alert level C

```
PLAT220_ALERT_2_C NonSolvent Resd 1 O Ueq(max)/Ueq(min) Range 3.2 Ratio PLAT222_ALERT_3_C NonSolvent Resd 1 H Uiso(max)/Uiso(min) Range 4.4 Ratio PLAT230_ALERT_2_C Hirshfeld Test Diff for O00N --C00B . 6.5 s.u. PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of C00B Check PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of C00F Check
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```
PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds......0.0058 Ang.
PLAT412_ALERT_2_C Short Intra XH3 .. XHn
                                           H00B
                                                   ..H00D
                                                                  1.83 Ang.
                                            1_555 Check
                                  x,y,z =
PLAT413_ALERT_2_C Short Inter XH3 .. XHn
                                           H00H
                                                   ..H00A
                                                                  2.09 Ana.
                              1-x,2-y,1-z =
                                              2 676 Check
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance...... 11.819 Check
PLAT906 ALERT 3 C Large K Value in the Analysis of Variance......2.447 Check
PLAT911 ALERT 3 C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                                       23 Report
          0 1 0, 10 3 0, -10 -3 1, 9 -2 1, 10 3 1, -5 -2 2,
         -5 0 2, -7 -9 3, -1 -7 3, 3 -2 4, -7 3 4, 4 9 4,
         4 10 4, -7 3 5, 1 -8 6, -9 0 6, 0 7 6, -4 -7 7,
         -8 1 7, -6 -4 8, -5 5 9, 4 1 11, -4 0 12,
PLAT977 ALERT 2 C Check Negative Difference Density on H00B
                                                                   -0.42 eA-3
PLAT977_ALERT_2_C Check Negative Difference Density on H00A
                                                                   -0.37 eA-3
Alert level G
PLAT002 ALERT 2 G Number of Distance or Angle Restraints on AtSite
                                                                       4 Note
PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms ......
                                                                     1 Report
PLAT172_ALERT_4_G The CIF-Embedded .res File Contains DFIX Records
                                                                        1 Report
PLAT173_ALERT_4_G The CIF-Embedded .res File Contains DANG Records
                                                                         1 Report
PLAT199_ALERT_1_G Reported _cell_measurement_temperature ..... (K)
                                                                       293 Check
PLAT200_ALERT_1_G Reported __diffrn_ambient_temperature ..... (K)
                                                                     293 Check
PLAT343_ALERT_2_G Unusual sp?
                                  Angle Range in Main Residue for
                                                                    C00B Check
PLAT367 ALERT 2 G Long? C(sp?)-C(sp?) Bond C008
                                                                   1.50 Ang.
PLAT398_ALERT_2_G Deviating C-O-C Angle From 120 for O002 . 108.5 Degree
PLAT398 ALERT 2 G Deviating C-O-C Angle From 120 for O003 . 109.1 Degree
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels ......... 43 Note
         0001
                0002
                       0003
                              0004
                                      0005
                                             C006
                                                    C007
                                                           H007
         C008
                H008
                       C009
                              C00A
                                     C00B
                                             H00B
                                                    C00C
                                                           C00D
        C00E
               H00E
                      C00F
                              C00G
                                                    H00H
                                     H<sub>0</sub>0G
                                             C00H
                                                            C001
                      H00A
                              H<sub>0</sub>0C
                                     H00D
                                             C00K
                                                    H00F
         H00I
               COOJ
                                                           HOOJ
        H00K
               COOL HOOL
                              H00M
                                     HOON
                                             C00M
                                                    H000
                                                            H00P
         H00Q 000N
                       H00R
PLAT793 ALERT 4 G Model has Chirality at C007
                                                 (Centro SpGr)
                                                                     S Verify
PLAT793 ALERT 4 G Model has Chirality at C008
                                                 (Centro SpGr)
                                                                     S Verify
PLAT860 ALERT 3 G Number of Least-Squares Restraints ......
                                                                    2 Note
PLAT912 ALERT 4 G Missing # of FCF Reflections Above STh/L= 0.600
                                                                       49 Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity......2.5 Low
PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value......3.203 Note
        Predicted wR2: Based on SigI**2 7.85 or SHELX Weight 21.20
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                       0 Info
PLAT992 ALERT 5 G Repd & Actual refins number gt Values Differ by
                                                                       4 Check
 0 ALERT level A = Most likely a serious problem - resolve or explain
 0 ALERT level B = A potentially serious problem, consider carefully
 13 ALERT level C = Check. Ensure it is not caused by an omission or oversight
 19 ALERT level G = General information/check it is not something unexpected
 2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
 14 ALERT type 2 Indicator that the structure model may be wrong or deficient
 7 ALERT type 3 Indicator that the structure quality may be low
 6 ALERT type 4 Improvement, methodology, guery or suggestion
 3 ALERT type 5 Informative message, check
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It is advisable to attempt to resolve as many as possible of the alerts in all categories. Often the minor alerts point to easily fixed oversights, errors and omissions in your CIF or refinement strategy, so attention to these fine details can be worthwhile. In order to resolve some of the more serious problems it may be necessary to carry out additional measurements or structure refinements. However, the purpose of your study may justify the reported deviations and the more serious of these should normally be commented upon in the discussion or experimental section of a paper or in the "special\_details" fields of the CIF. checkCIF was carefully designed to identify outliers and unusual parameters, but every test has its limitations and alerts that are not important in a particular case may appear. Conversely, the absence of alerts does not guarantee there are no aspects of the results needing attention. It is up to the individual to critically assess their own results and, if necessary, seek expert advice.

### Publication of your CIF in IUCr journals

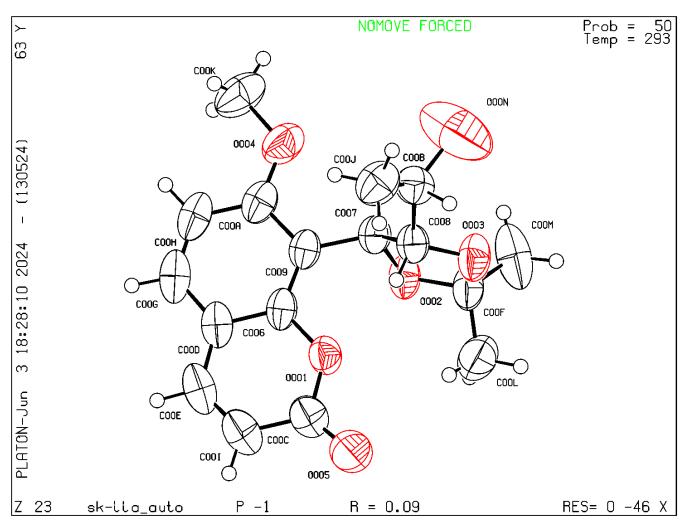
A basic structural check has been run on your CIF. These basic checks will be run on all CIFs submitted for publication in IUCr journals (*Acta Crystallographica*, *Journal of Applied Crystallography*, *Journal of Synchrotron Radiation*); however, if you intend to submit to *Acta Crystallographica Section C* or *E* or *IUCrData*, you should make sure that full publication checks are run on the final version of your CIF prior to submission.

#### Publication of your CIF in other journals

Please refer to the *Notes for Authors* of the relevant journal for any special instructions relating to CIF submission.

## PLATON version of 13/05/2024; check.def file version of 04/05/2024

# Datablock Ghosalin\_auto - ellipsoid plot



Download CIF editor (publCIF) from the IUCr Download CIF editor (enCIFer) from the CCDC Test a new CIF entry