

## checkCIF/PLATON report

Structure factors have been supplied for datablock(s) ale288

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      Interpreting this report

### Datablock: ale288

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Bond precision:    C-C = 0.0132 A

Wavelength=0.71073

Cell:                    a=11.2955 (13)            b=13.2811 (15)            c=17.903 (2)  
                          alpha=84.806 (3)        beta=81.693 (3)        gamma=88.358 (4)  
Temperature:        100 K

	Calculated	Reported
Volume	2646.3 (5)	2646.3 (5)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C68 H40 Ag4 F12 N4 O20 S4 Se2, 8(C H Cl3)	?
Sum formula	C76 H48 Ag4 Cl24 F12 N4 O20 S4 Se2	C76 H48 Ag4 Cl24 F12 N4 O20 S4 Se2
Mr	3133.63	3133.62
Dx, g cm <sup>-3</sup>	1.966	1.966
Z	1	1
Mu (mm <sup>-1</sup> )	2.188	2.188
F000	1528.0	1528.0
F000'	1528.92	
h, k, lmax		13, 15, 21
Nref		9332
Tmin, Tmax	0.845, 0.951	0.780, 0.950
Tmin'	0.838	

Correction method= # Reported T Limits: Tmin=0.780 Tmax=0.950

AbsCorr = MULTI-SCAN

Data completeness=

Theta (max) = 25.000

R(reflections)= 0.0669( 6615)

wR2(reflections)=  
0.1764( 9332)

S = 1.036

Npar= 658

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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.

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● **Alert level C**

RINTA01\_ALERT\_3\_C The value of Rint is greater than 0.12  
Rint given 0.121

PLAT213\_ALERT\_2\_C Atom O5 has ADP max/min Ratio ..... 3.1 prolat

PLAT234\_ALERT\_4\_C Large Hirshfeld Difference C11 --C16 . 0.16 Ang.

PLAT241\_ALERT\_2\_C High 'MainMol' Ueq as Compared to Neighbors of 05 Check

PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of S1 Check

PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C35 Check

PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C36 Check

PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C37 Check

PLAT342\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.01319 Ang.

PLAT906\_ALERT\_3\_C Large K Value in the Analysis of Variance ..... 5.706 Check

PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 1.17Ang From C17 2.47 eA-3

PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 1.08Ang From Ag2 1.81 eA-3

PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 1.11Ang From Ag2 1.51 eA-3

PLAT972\_ALERT\_2\_C Check Calcd Resid. Dens. 0.82Ang From C17 -1.56 eA-3

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● **Alert level G**

PLAT020\_ALERT\_3\_G The Value of Rint is Greater Than 0.12 ..... 0.121 Report

PLAT083\_ALERT\_2\_G SHELXL Second Parameter in WGHT Unusually Large 33.54 Why ?

PLAT242\_ALERT\_2\_G Low 'MainMol' Ueq as Compared to Neighbors of C33 Check

PLAT242\_ALERT\_2\_G Low 'MainMol' Ueq as Compared to Neighbors of C34 Check

PLAT398\_ALERT\_2\_G Deviating C-O-C Angle From 120 for O1 . 105.0 Degree

PLAT398\_ALERT\_2\_G Deviating C-O-C Angle From 120 for O3 . 105.3 Degree

PLAT431\_ALERT\_2\_G Short Inter HL..A Contact C110 ..03 . 3.13 Ang.  
1-x,-y,2-z = 2\_657 Check

PLAT790\_ALERT\_4\_G Centre of Gravity not Within Unit Cell: Resd. # 4 Note  
C H C13

PLAT883\_ALERT\_1\_G No Info/Value for \_atom\_sites\_solution\_primary . Please Do !

PLAT909\_ALERT\_3\_G Percentage of I>2sig(I) Data at Theta(Max) Still 42% Note

PLAT910\_ALERT\_3\_G Missing # of FCF Reflection(s) Below Theta(Min). 4 Note  
1 0 0, 0 1 0, 0 0 1, 0 1 1,

PLAT961\_ALERT\_5\_G Dataset Contains no Negative Intensities ..... Please Check

PLAT967\_ALERT\_5\_G Note: Two-Theta Cutoff Value in Embedded .res .. 50.0 Degree

PLAT978\_ALERT\_2\_G Number C-C Bonds with Positive Residual Density. 0 Info

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0 **ALERT level A** = Most likely a serious problem - resolve or explain

0 **ALERT level B** = A potentially serious problem, consider carefully

14 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight

14 **ALERT level G** = General information/check it is not something unexpected

1 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  
6 ALERT type 3 Indicator that the structure quality may be low  
5 ALERT type 4 Improvement, methodology, query or suggestion  
2 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.

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**PLATON version of 14/11/2023; check.def file version of 14/09/2023**

