

# checkCIF/PLATON report

You have not supplied any structure factors. As a result the full set of tests cannot be run.

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: 1n

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Bond precision:	C-C = 0.0312 A	Wavelength=0.71073
Cell:	a=12.166(4)	b=13.376(5)      c=18.035(5)
	alpha=68.76(2)	beta=74.17(2)      gamma=66.27(2)
Temperature:	100 K	
	Calculated	Reported
Volume	2476.3(15)	2476.5(15)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C44 H33 Cu2 I2 N6 O2, 2(C H Cl3)	C44 H33 Cu2 I2 N6 O2, 2(C H Cl3)
Sum formula	C46 H35 Cl6 Cu2 I2 N6 O2	C46 H36 Cl6 Cu2 I2 N6 O2
Mr	1297.40	1298.39
Dx,g cm-3	1.740	1.741
Z	2	2
Mu (mm-1)	2.473	2.473
F000	1270.0	1272.0
F000'	1271.47	
h,k,lmax	14,16,21	14,16,21
Nref	9145	8187
Tmin,Tmax	0.427,0.431	0.425,0.745
Tmin'	0.395	

Correction method= # Reported T Limits: Tmin=0.425 Tmax=0.745  
AbsCorr = MULTI-SCAN

Data completeness= 0.895      Theta(max)= 25.438

R(reflections)= 0.1083( 4960)      wR2(reflections)= 0.3533( 8187)

S = 1.228      Npar= 556

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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.



### Alert level B

PLAT342\_ALERT\_3\_B Low Bond Precision on C-C Bonds ..... 0.03119 Ang.

**Author Response: The crystal was poorly diffracting at higher Bragg angles and this alert is comming due to poor data quality.**



### Alert level C

PLAT029\_ALERT\_3\_C \_diffn\_measured\_fraction\_theta\_full value Low . 0.961 Why?  
PLAT041\_ALERT\_1\_C Calc. and Reported SumFormula Strings Differ Please Check  
PLAT082\_ALERT\_2\_C High R1 Value ..... 0.11 Report  
PLAT084\_ALERT\_3\_C High wR2 Value (i.e. > 0.25) ..... 0.35 Report  
PLAT213\_ALERT\_2\_C Atom C31 has ADP max/min Ratio ..... 3.1 prolat  
PLAT213\_ALERT\_2\_C Atom C34 has ADP max/min Ratio ..... 3.4 prolat  
PLAT234\_ALERT\_4\_C Large Hirshfeld Difference N2 --C6 . 0.20 Ang.  
PLAT234\_ALERT\_4\_C Large Hirshfeld Difference N6 --C36 . 0.18 Ang.  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C46 Check  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C45 Check  
PLAT260\_ALERT\_2\_C Large Average Ueq of Residue Including C14 0.183 Check  
PLAT336\_ALERT\_2\_C Long Bond Distance for ..... C45 -C15 1.900 Ang.



### Alert level G

FORMU01\_ALERT\_1\_G There is a discrepancy between the atom counts in the  
\_chemical\_formula\_sum and \_chemical\_formula\_moiety. This is  
usually due to the moiety formula being in the wrong format.  
Atom count from \_chemical\_formula\_sum: C46 H36 Cl6 Cu2 I2 N6 O2  
Atom count from \_chemical\_formula\_moiety:C46 H35 Cl6 Cu2 I2 N6 O2  
FORMU01\_ALERT\_2\_G There is a discrepancy between the atom counts in the  
\_chemical\_formula\_sum and the formula from the \_atom\_site\* data.  
Atom count from \_chemical\_formula\_sum:C46 H36 Cl6 Cu2 I2 N6 O2  
Atom count from the \_atom\_site data: C46 H35 Cl6 Cu2 I2 N6 O2  
CELLZ01\_ALERT\_1\_G Difference between formula and atom\_site contents detected.  
CELLZ01\_ALERT\_1\_G WARNING: H atoms missing from atom site list. Is this intentional?  
From the CIF: \_cell\_formula\_units\_Z 2  
From the CIF: \_chemical\_formula\_sum C46 H36 Cl6 Cu2 I2 N6 O2  
TEST: Compare cell contents of formula and atom\_site data

atom	Z*formula	cif sites	diff
C	92.00	92.00	0.00
H	72.00	70.00	2.00
Cl	12.00	12.00	0.00
Cu	4.00	4.00	0.00
I	4.00	4.00	0.00
N	12.00	12.00	0.00
O	4.00	4.00	0.00

PLAT004\_ALERT\_5\_G Polymeric Structure Found with Maximum Dimension 2 Info  
PLAT012\_ALERT\_1\_G N.O.K. \_shelx\_res\_checksum Found in CIF ..... Please Check  
PLAT068\_ALERT\_1\_G Reported F000 Differs from Calcd (or Missing)... Please Check  
PLAT072\_ALERT\_2\_G SHELXL First Parameter in WGHT Unusually Large 0.20 Report  
PLAT154\_ALERT\_1\_G The s.u.'s on the Cell Angles are Equal ..(Note) 0.02 Degree  
PLAT171\_ALERT\_4\_G The CIF-Embedded .res File Contains EADP Records 4 Report  
PLAT343\_ALERT\_2\_G Unusual sp? Angle Range in Main Residue for C29 Check

PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels .....	6	Note
PLAT804_ALERT_5_G	Number of ARU-Code Packing Problem(s) in PLATON	8	Info
PLAT870_ALERT_4_G	ALERTS Related to Twinning Effects Suppressed ..	!	Info
PLAT933_ALERT_2_G	Number of OMIT Records in Embedded .res File ...	11	Note

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0 **ALERT level A** = Most likely a serious problem - resolve or explain  
 1 **ALERT level B** = A potentially serious problem, consider carefully  
 12 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
 15 **ALERT level G** = General information/check it is not something unexpected

7 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
 9 ALERT type 2 Indicator that the structure model may be wrong or deficient  
 3 ALERT type 3 Indicator that the structure quality may be low  
 7 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.

