

# 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: 1x

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Bond precision:	C-C = 0.0110 Å	Wavelength=0.71073
Cell:	a=24.2935(9)	b=12.6330(5)      c=17.7632(6)
	alpha=90	beta=113.007(1)      gamma=90
Temperature:	100 K	
	Calculated	Reported
Volume	5017.9(3)	5017.9(3)
Space group	C 2/c	C 1 2/c 1
Hall group	-C 2yc	-C 2yc
Moiety formula	C22 H17 Cu I N3 O, 0.179(C14 H10 N2), 0.642(C7 H6 N)	C22 H17 Cu I N3 O, 0.36(C7 H5 N), 0.64(C7 H6 N)
Sum formula	C29 H22.64 Cu I N4 O	C29 H22.64 Cu I N4 O
Mr	633.60	633.59
Dx, g cm <sup>-3</sup>	1.677	1.677
Z	8	8
Mu (mm <sup>-1</sup> )	2.131	2.131
F000	2517.1	2517.0
F000'	2516.59	
h,k,lmax	29,15,21	29,15,21
Nref	4613	4606
Tmin,Tmax	0.533,0.587	0.521,0.745
Tmin'	0.470	

Correction method= # Reported T Limits: Tmin=0.521 Tmax=0.745  
AbsCorr = MULTI-SCAN

Data completeness= 0.998      Theta(max)= 25.367

R(reflections)= 0.0662( 3920)      wR2(reflections)= 0.1907( 4606)

S = 1.047      Npar= 321

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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 C

CRYSC01\_ALERT\_1\_C The word below has not been recognised as a standard identifier.

dull

DIFMN02\_ALERT\_2\_C The minimum difference density is < -0.1\*ZMAX\*0.75

\_refine\_diff\_density\_min given = -4.974

Test value = -3.975

DIFMN03\_ALERT\_1\_C The minimum difference density is < -0.1\*ZMAX\*0.75

The relevant atom site should be identified.

PLAT098\_ALERT\_2\_C Large Reported Min. (Negative) Residual Density -4.97 eA-3

PLAT230\_ALERT\_2\_C Hirshfeld Test Diff for N2 --C7 . 5.4 s.u.

PLAT234\_ALERT\_4\_C Large Hirshfeld Difference C26B --C27B . 0.19 Ang.

PLAT241\_ALERT\_2\_C High MainMol Ueq as Compared to Neighbors of N2 Check

PLAT250\_ALERT\_2\_C Large U3/U1 Ratio for Average U(i,j) Tensor .... 2.1 Note

PLAT250\_ALERT\_2\_C Large U3/U1 Ratio for Average U(i,j) Tensor .... 2.5 Note

PLAT342\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.01095 Ang.



### Alert level G

PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 2 Note

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

PLAT042\_ALERT\_1\_G Calc. and Reported MoietyFormula Strings Differ 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 0.10 Report

PLAT083\_ALERT\_2\_G SHELXL Second Parameter in WGHT Unusually Large 83.01 Why ?

PLAT128\_ALERT\_4\_G Alternate Setting for Input Space Group C2/c I2/a Note

PLAT171\_ALERT\_4\_G The CIF-Embedded .res File Contains EADP Records 8 Report

PLAT172\_ALERT\_4\_G The CIF-Embedded .res File Contains DFIX Records 1 Report

PLAT232\_ALERT\_2\_G Hirshfeld Test Diff (M-X) I1 --Cul . 5.8 s.u.

PLAT232\_ALERT\_2\_G Hirshfeld Test Diff (M-X) I1 --Cul\_a . 8.3 s.u.

PLAT300\_ALERT\_4\_G Atom Site Occupancy of N4B Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C23A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C24A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C25A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C26A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C27A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C28A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C29A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H23A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H24A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H25A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H27A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H28A Constrained at 0.3584 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of N4A Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C23B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C24B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C25B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C26B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C27B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C28B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of C29B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H23B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H24B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H25B Constrained at 0.6416 Check

PLAT300\_ALERT\_4\_G Atom Site Occupancy of H27B Constrained at 0.6416 Check

PLAT300_ALERT_4_G	Atom Site Occupancy of H29A	Constrained at	0.6416	Check
PLAT300_ALERT_4_G	Atom Site Occupancy of H29B	Constrained at	0.6416	Check
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 2 )		100%	Note
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 3 )		100%	Note
PLAT431_ALERT_2_G	Short Inter HL..A Contact I1 ..N4A .		2.82	Ang.
	1/2-x,1/2+y,3/2-z =		4_556	Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C12 ..C28B		2.79	Ang.
	x,1-y,-1/2+z =		6_565	Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C13 ..C28B		2.89	Ang.
	x,1-y,-1/2+z =		6_565	Check
PLAT860_ALERT_3_G	Number of Least-Squares Restraints .....		1	Note

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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  
 10 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
 45 **ALERT level G** = General information/check it is not something unexpected

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

