

# checkCIF/PLATON report

Structure factors have been supplied for datablock(s) test

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: test

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Bond precision:    C-C = 0.0048 A

Wavelength=0.71073

Cell:                a=7.959(3)                b=8.885(3)                c=12.269(5)  
                      alpha=73.239(16)        beta=72.615(16)        gamma=83.178(18)  
Temperature:    296 K

	Calculated	Reported
Volume	792.3(5)	792.3(5)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C18 H26 Cl4 Cu2 N8 O2 S2, 4(H2 O)	C18 H26 Cl4 Cu2 N8 O2 S2, 4(H2 O)
Sum formula	C18 H34 Cl4 Cu2 N8 O6 S2	C18 H34 Cl4 Cu2 N8 O6 S2
Mr	791.55	791.53
Dx, g cm-3	1.659	1.659
Z	1	1
Mu (mm-1)	1.857	1.857
F000	404.0	404.0
F000'	405.58	
h,k,lmax	10,11,16	10,11,15
Nref	3754	3598
Tmin,Tmax	0.723,0.831	0.637,0.746
Tmin'	0.622	

Correction method= # Reported T Limits: Tmin=0.637 Tmax=0.746  
AbsCorr = MULTI-SCAN

Data completeness= 0.958

Theta(max)= 27.794

R(reflections)= 0.0424( 2842)

wR2(reflections)= 0.1153( 3598)

S = 1.044

Npar= 189

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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

PLAT029_ALERT_3_C	_diffrn_measured_fraction_theta_full	value Low	.	0.977	Why?
PLAT242_ALERT_2_C	Low	'MainMol' Ueq as Compared to Neighbors of		S3	Check



### Alert level G

PLAT007_ALERT_5_G	Number of Unrefined Donor-H Atoms	.....		4	Report
PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X)	Cu1 --Cl1	.	24.5	s.u.
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels	.....		4	Note
PLAT790_ALERT_4_G	Centre of Gravity not Within Unit Cell: Resd.	#		2	Note
	H2 O				
PLAT794_ALERT_5_G	Tentative Bond Valency for Cu1	(II)	.	2.15	Info
PLAT883_ALERT_1_G	No Info for _atom_sites_solution_primary	.....			Please Do !
PLAT933_ALERT_2_G	Number of OMIT Records in Embedded	.res File ...		2	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  
2 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
7 **ALERT level G** = General information/check it is not something unexpected

1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
3 ALERT type 2 Indicator that the structure model may be wrong or deficient  
1 ALERT type 3 Indicator that the structure quality may be low  
2 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 18/02/2019; check.def file version of 18/02/2019**

