# 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: shelxl**

Bond precision: C-C = 0.0244 A Wavelength=0.71073 Cell: a=10.8500(7) b=9.5950(3) c=19.8390(13)alpha=90 beta=105.962(2) gamma=90 Temperature: 293 K Calculated Reported Volume 1985.72(19) 1985.72(19)P 21/c Space group P2(1)/c Hall group -P 2ybc ? Moiety formula C40 H36 Au2 Fe N2 P2 S4 ? Sum formula C40 H36 Au2 Fe N2 P2 S4 C40 H36 Au2 Fe N2 P2 S4 Mr 1184.72 1184.67 1.981 1.981 Dx,g cm-3 2 2 Ζ Mu (mm-1) 8.053 8.053 F000 1136.0 1136.0 F000′ 1130.70 h,k,lmax 14,12,25 14,12,25 Nref 4520 4473 0.154,0.170 Tmin,Tmax Tmin′ 0.116 Correction method= Not given Data completeness= 0.990 Theta(max) = 27.400R(reflections) = 0.0582(2551) wR2(reflections) = 0.1861(4473) S = 1.049Npar= 233

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 ..... 0.0244 Ang.

## Alert level C

PLAT057_ALERT_3_C Correc	ction for Absorption Require	d	RT(exp)		1.11	
PLAT234_ALERT_4_C Large	Hirshfeld Difference N1		C1	••	0.17	Ang.
PLAT234_ALERT_4_C Large	Hirshfeld Difference C2		C3		0.24	Ang.
PLAT234_ALERT_4_C Large	Hirshfeld Difference C23		C24		0.20	Ang.
PLAT234_ALERT_4_C Large	Hirshfeld Difference C31		C32	••	0.16	Ang.
PLAT234_ALERT_4_C Large	Hirshfeld Difference C33		C34		0.22	Ang.
PLAT241_ALERT_2_C High	Ueq as Compared to Neig	hboı	rs for .		C2	Check
PLAT360_ALERT_2_C Short	C(sp3)-C(sp3) Bond C2	-	C3		1.42	Ang.

### Alert level G

PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF	Please Do !
PLAT128_ALERT_4_G Alternate Setting for Input Space-Group P21/c	P21/n Note
PLAT180_ALERT_4_G Check Cell Rounding: # of Values Ending with 0 =	3
PLAT199_ALERT_1_G Reported _cell_measurement_temperature (K)	293 Check
PLAT200_ALERT_1_G Reporteddiffrn_ambient_temperature (K)	293 Check

0 ALERT level A = Most likely a serious problem - resolve or explain
1 ALERT level B = A potentially serious problem, consider carefully
8 ALERT level C = Check. Ensure it is not caused by an omission or oversight
5 ALERT level G = General information/check it is not something unexpected
2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
2 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
7 ALERT type 4 Improvement, methodology, query or suggestion
1 ALERT type 5 Informative message, check

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*, 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 18/09/2013; check.def file version of 12/09/2013

