checkCIF/PLATON report

Structure factors have been supplied for datablock(s) shelx

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: shelx

```
Bond precision: C-C = 0.0052 A
                                       Wavelength=0.71073
Cell:
             a=6.6021(5) b=7.5617(7)
                                               c=8.1001(7)
             alpha=110.521(8) beta=100.869(7)
                                                 qamma = 99.006(7)
Temperature: 293 K
               Calculated
                                        Reported
Volume
               360.87(6)
                                         360.87(6)
Space group
              P 1
                                        P 1
Hall group
               P 1
                                        P 1
Moiety formula C8 H13 N5, 2(C N S)
                                        C8 H13 N5, 2(N C S)
Sum formula
             C10 H13 N7 S2
                                        C10 H13 N7 S2
Mr
               295.39
                                        295.39
               1.359
                                        1.359
Dx,g cm-3
Ζ
                                         1
Mu (mm-1)
               0.367
                                         0.367
F000
               154.0
                                         154.0
F000′
               154.28
h,k,lmax
               8,10,10
                                        8,10,10
               3784[ 1892]
Nref
                                         2846
               0.838,0.943
                                        0.924,1.000
Tmin,Tmax
Tmin'
               0.820
Correction method= # Reported T Limits: Tmin=0.924 Tmax=1.000
AbsCorr = MULTI-SCAN
Data completeness= 1.50/0.75 Theta(max)= 28.911
R(reflections) = 0.0348( 2560) wR2(reflections) = 0.0887( 2846)
S = 1.027
                         Npar= 193
```

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

PLAT242_ALERT_2_C Low	'MainMol' Ueq as	Compared to	Neighbors o	of C9	Check
PLAT242_ALERT_2_C Low	'MainMol' Ueq as	Compared to	Neighbors o	of C10	Check
PLAT340_ALERT_3_C Low	Bond Precision on (C-C Bonds		0.00517	Ang.
PLAT420_ALERT_2_C D-H	Without Acceptor	N1	- H1A .	Please	Check
PLAT915_ALERT_3_C No F	lack x Check Done: I	Low Friedel I	Pair Coverag	ge 63	%

Alert level G

PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite	8	Note
PLAT042_ALERT_1_G Calc. and Reported MoietyFormula Strings Differ	Please	Check
PLAT172_ALERT_4_G The CIF-Embedded .res File Contains DFIX Records	3	Report
PLAT199_ALERT_1_G Reported _cell_measurement_temperature (K)	293	Check
PLAT200_ALERT_1_G Reporteddiffrn_ambient_temperature (K)	293	Check
PLAT790_ALERT_4_G Centre of Gravity not Within Unit Cell: Resd. #	2	Note
C N S		
PLAT860_ALERT_3_G Number of Least-Squares Restraints	10	Note
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600	231	Note
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.	1	Info

- 0 ALERT level ${\bf A}$ = Most likely a serious problem resolve or explain
- 0 ALERT level B = A potentially serious problem, consider carefully
- 5 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
- 9 ALERT level ${\tt G}$ = General information/check it is not something unexpected
- 3 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 5 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
- 3 ALERT type 4 Improvement, methodology, query or suggestion
- O 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* 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.

PLATON version of 13/08/2017; check.def file version of 27/07/2017

