# checkCIF/PLATON report

Structure factors have been supplied for datablock(s) SKM302\_0m\_a

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.

## Datablock: SKM302\_0m\_a

```
Wavelength=0.71073
Bond precision: C-C = 0.0015 A
Cell:
                a=8.8009(6)
                             b=11.5653(8)
                                                     c=11.8909(8)
                alpha=68.324(3) beta=87.083(3)
                                                     gamma = 75.382(3)
                150 K
Temperature:
                Calculated
                                            Reported
Volume
                1087.12(13)
                                            1087.12(13)
Space group
               P -1
                                            P -1
Hall group
                -P 1
                                            -P 1
                                            C26 H23 N3 O S
Moiety formula C26 H23 N3 O S
Sum formula
                C26 H23 N3 O S
                                            C26 H23 N3 O S
                425.53
                                            425.53
Mr
                1.300
                                            1.300
Dx,g cm-3
                2
Mu (mm-1)
                0.172
                                            0.172
F000
                448.0
                                            448.0
F000'
                448.40
h, k, lmax
                13,17,18
                                            13, 17, 18
Nref
                8189
                                            8104
Tmin, Tmax
                0.947,0.988
                                            0.940,0.990
Tmin'
                0.941
Correction method= # Reported T Limits: Tmin=0.940 Tmax=0.990
AbsCorr = NUMERICAL
Data completeness= 0.990
                                    Theta (max) = 32.977
                                                      wR2 (reflections) =
R(reflections) = 0.0385(7245)
                                                      0.1032(8104)
S = 1.051
                          Npar= 286
```

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

PLAT911\_ALERT\_3\_C Missing FCF Refl Between Thmin & STh/L= 0.600 15 Report PLAT913\_ALERT\_3\_C Missing # of Very Strong Reflections in FCF .... 12 Note

#### Alert level G

PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 2 Note PLAT066\_ALERT\_1\_G Predicted and Reported Tmin&Tmax Range Identical ? Check PLAT154\_ALERT\_1\_G The s.u.'s on the Cell Angles are Equal .. (Note) 0.003 Degree PLAT172\_ALERT\_4\_G The CIF-Embedded .res File Contains DFIX Records 1 Report PLAT230\_ALERT\_2\_G Hirshfeld Test Diff for C2 --C10 7.4 s.u. R Verify PLAT793\_ALERT\_4\_G Model has Chirality at C7 (Centro SPGR) PLAT860\_ALERT\_3\_G Number of Least-Squares Restraints ...... 1 Note PLAT910\_ALERT\_3\_G Missing # of FCF Reflection(s) Below Theta(Min). 2 Note PLAT912\_ALERT\_4\_G Missing # of FCF Reflections Above STh/L= 0.600 68 Note PLAT933\_ALERT\_2\_G Number of HKL-OMIT Records in Embedded .res File 5 Note PLAT978\_ALERT\_2\_G Number C-C Bonds with Positive Residual Density. 21 Info

- 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
- 11 **ALERT level G** = General information/check it is not something unexpected
- 2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 4 ALERT type 2 Indicator that the structure model may be wrong or deficient
- 4 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 28/11/2022; check.def file version of 28/11/2022

