## checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 250319zyd

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: 250319zyd

```
Bond precision: C-C = 0.0035 A
                                        Wavelength=1.34139
                  a=5.9233(1) b=12.0750(2)
Cell:
                                                 c=21.9490(4)
                                 beta=90
                                                  gamma=90
                  alpha=90
                  170 K
Temperature:
               Calculated
                                         Reported
Volume
               1569.88(5)
                                         1569.88(5)
Space group
              P 21 21 21
                                        P 21 21 21
                                        P 2ac 2ab
Hall group P 2ac 2ab
Moiety formula C17 H21 N O S
                                        C17 H21 N O S
                                         C17 H21 N O S
Sum formula C17 H21 N O S
Mr
               287.41
                                         287.41
Dx,g cm-3
              1.216
                                         1.216
               4
Mu (mm-1)
             1.167
                                         1.194
F000
               616.0
                                         616.0
F000'
              618.27
h,k,lmax
               7,14,26
                                         7,14,26
Nref
               2990[ 1756]
                                         2981
Tmin, Tmax
             0.816,0.942
                                         0.615,0.751
Tmin'
               0.816
Correction method= # Reported T Limits: Tmin=0.615 Tmax=0.751
AbsCorr = MULTI-SCAN
Data completeness= 1.70/1.00 Theta(max) = 54.860
                                                   wR2 (reflections) =
R(reflections) = 0.0302(2872)
                                                   0.0825(2981)
S = 1.048
                         Npar= 188
```

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
PLAT213_ALERT_2_C Atom C9
                                   has ADP max/min Ratio .....
                                                                    3.2 prolat
PLAT220_ALERT_2_C NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range
                                                                     4.6 Ratio
PLAT222_ALERT_3_C NonSolvent Resd 1 H Uiso(max)/Uiso(min) Range
                                                                     4.3 Ratio
PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of
                                                                     C7 Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L=
                                                      0.600
                                                                      3 Report
              1 1 1, 0 2 3, 0 0 22,
PLAT987_ALERT_1_C The Flack x is >> 0 - Do a BASF/TWIN Refinement
                                                                  Please Check
Alert level G
```

- Wielf level G	
ABSMU01_ALERT_1_G Calculation of _exptl_absorpt_correction_mu	
not performed for this radiation type.	
PLAT033_ALERT_4_G Flack x Value Deviates > 3.0 * Sigma from Zero .	0.036 Note
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min).	1 Note
0 0 2,	
PLAT913_ALERT_3_G Missing # of Very Strong Reflections in FCF	2 Note
1 1 1, 0 2 3,	
PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value	2.270 Note
Predicted wR2: Based on SigI**2 3.63 or SHELX Weigh	t 7.88
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.	10 Info
PLAT984_ALERT_1_G The N-f' = 0.0253 Deviates from the B&C-Value	0.0241 Check

- 0 **ALERT level A** = Most likely a serious problem resolve or explain
- O ALERT level B = A potentially serious problem, consider carefully
- 6 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
- 3 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
- 1 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* 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 02/02/2025; check.def file version of 02/02/2025

