checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 5353f

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: 5353f

```
Bond precision: C-C = 0.0042 A
                                        Wavelength=0.71073
Cell:
                a=4.6833(3)
                               b=28.2023(18)
                                                   c=5.4732(4)
                alpha=90
                                beta=98.690(3)
                                                   gamma=90
Temperature:
                100 K
               Calculated
                                         Reported
Volume
               714.60(8)
                                         714.60(8)
Space group
              P 21
                                         P 1 21 1
Hall group
              P 2yb
                                         P 2yb
Moiety formula C15 H18 N4 O3
                                        C15 H18 N4 O3
Sum formula
             C15 H18 N4 O3
                                       C15 H18 N4 O3
Mr
               302.33
                                         302.33
               1.405
                                         1.405
Dx,g cm-3
               2
Ζ
Mu (mm-1)
               0.101
                                         0.101
F000
               320.0
                                         320.0
F000′
               320.14
h,k,lmax
               6,39,7
                                         6,39,7
               4207[ 2143]
Nref
                                         4180
               0.976,0.992
                                         0.605,0.746
Tmin,Tmax
Tmin'
               0.960
Correction method= # Reported T Limits: Tmin=0.605 Tmax=0.746
AbsCorr = MULTI-SCAN
Data completeness= 1.95/0.99 Theta(max)= 30.062
R(reflections) = 0.0441(3602) wR2(reflections) = 0.1097(4180)
S = 1.026
                         Npar= 201
```

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
PLAT220_ALERT_2_C Non-Solvent Resd 1 C Ueq(max)/Ueq(min) Range
                                                                   3.1 Ratio
PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds ...... 0.00417 Ang.
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                                         5 Report
  Alert level G
PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms .....
                                                                         4 Report
PLAT032_ALERT_4_G Std. Uncertainty on Flack Parameter Value High .
                                                                    0.500 Report
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
                                                                         6 Note
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ...
                                                                         6 Note
PLAT978 ALERT 2 G Number C-C Bonds with Positive Residual Density.
                                                                         8 Info
  0 ALERT level A = Most likely a serious problem - resolve or explain
  0 ALERT level B = A potentially serious problem, consider carefully
  3 ALERT level C = Check. Ensure it is not caused by an omission or oversight
  6 ALERT level G = General information/check it is not something unexpected
  0 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
  3 ALERT type 3 Indicator that the structure quality may be low
  2 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 19/10/2018; check.def file version of 15/10/2018

Datablock 5353f - ellipsoid plot

