checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 17112a

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: 17112a

Bond precision:  C-C = 0.0064 Å  Wavelength=0.71073

Cell:  a=10.098(4)  b=13.103(5)  c=14.443(5)
       alpha=90  beta=90  gamma=90

Temperature:  100 K

   Calculated      Reported
Volume  1911.0(12)  1911.0(12)
Space group  P 21 21 21  P 21 21 21
Hall group  P 2ac 2ab  P 2ac 2ab
Moiety formula  C21 H27 N O5  C21 H27 N O5
Sum formula  C21 H27 N O5  C21 H27 N O5
Mr  373.44  373.43
Dx,g cm-3  1.298  1.298
Z  4  4
Mu (mm-1)  0.092  0.092
F000  800.0  800.0
F000’  800.41
h,k,lmax  12,16,17  12,16,17
Nref  3758[ 2146]  3739
Tmin, Tmax  0.971, 0.982  0.519, 0.745
Tmin’  0.971

Correction method= # Reported T Limits: Tmin=0.519 Tmax=0.745
AbsCorr = MULTI-SCAN

Data completeness= 1.74/0.99  Theta(max)= 25.993
R(reflections)= 0.0514( 2537)  wr2(reflections)= 0.1478( 3739)
S = 1.027  Npar= 245

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

**STRVA01_ALERT_4_C**  
Flack test results are meaningless.  
From the CIF: _refine_ls_abs_structure_Flack  0.000  
From the CIF: _refine_ls_abs_structure_Flack_su  2.000

**PLAT340_ALERT_3_C**  
Low Bond Precision on C-C Bonds ...............  0.00639 Ang.

**PLAT905_ALERT_3_C**  
Negative K value in the Analysis of Variance ...  -0.338 Report

**PLAT978_ALERT_2_C**  
Number C-C Bonds with Positive Residual Density.          0 Info

Alert level G

**PLAT032_ALERT_4_G**  
Std. Uncertainty on Flack Parameter Value High .  2.000 Report

**PLAT398_ALERT_2_G**  
Deviating C-O-C Angle from 120 Deg for O1  107.3 Degree

**PLAT791_ALERT_4_G**  
The Model has Chirality at C5 (Chiral SPGR)  R Verify

**PLAT791_ALERT_4_G**  
The Model has Chirality at C8 (Chiral SPGR)  S Verify

**PLAT850_ALERT_4_G**  
Check Flack Parameter Exact Value 0.00 and s.u.  2.00 Check

**PLAT912_ALERT_4_G**  
Missing # of FCF Reflections Above STh/L=  0.600  7 Note

**PLAT916_ALERT_2_G**  
Hooft y and Flack x Parameter values differ by .  0.77 Check

0 ALERT level A = Most likely a serious problem - resolve or explain
0 ALERT level B = A potentially serious problem, consider carefully
4 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

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
2 ALERT type 3 Indicator that the structure quality may be low
6 ALERT type 4 Improvement, methodology, query or suggestion
0 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.