checkCIF/PLATON report

Structure factors have been supplied for datablock(s) qiyanyu_0m

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: qiyanyu_0m

Bond precision: C-C = 0.0156 A Wavelength=0.71073 Cell: a=13.645(2)b=16.443(3)c=28.430(5)alpha=90 beta=92.423(8) gamma=90 Temperature: 153 K Calculated Reported Volume 6373.0(19) 6372.8(18) P 21/n Space group P 21/n Hall group -P 2yn -P 2yn Moiety formula C33 H38 B I2 N O Sum formula C33 H38 B I2 N O C33 H38 B I2 N O Mr 729.25 729.25 1.520 1.520 Dx,g cm-3 8 Mu (mm-1)1.999 1.999 F000 2896.0 2896.0 F000′ 2889.30 h,k,lmax 16,19,33 16,19,33 Nref 11227 11233 0.625,0.670 Tmin,Tmax Tmin' 0.544 Correction method= Not given Data completeness= 1.001 Theta(max) = 25.000 R(reflections) = 0.0691(10551) wR2(reflections) = 0.2023(11233) S = 1.085Npar= 691

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

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Please Do !
PLAT052_ALERT_1_C Info on Absorption Correction Method Not Given
PLAT220_ALERT_2_C Non-Solvent Resd 1 C Ueq(max)/Ueq(min) Range 6.0 Ratio PLAT220_ALERT_2_C Non-Solvent Resd 2 C Ueq(max)/Ueq(min) Range 5.5 Ratio
PLAT222_ALERT_3_C Non-Solv. Resd 1 H Uiso(max)/Uiso(min) Range
                                                                         6.6 Ratio
PLAT222_ALERT_3_C Non-Solv. Resd 2 H Uiso(max)/Uiso(min) Range
                                                                         6.0 Ratio
PLAT342_ALERT_3_C Low Bond Precision on C-C Bonds ........... 0.01561 Ang.
                                                                     1.38 Ang.
PLAT360_ALERT_2_C Short C(sp3)-C(sp3) Bond C52 - C53 .
PLAT910_ALERT_3_C Missing # of FCF Reflection(s) Below Theta(Min).
                                                                        7 Note
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.595
                                                                         56 Report
PLAT913_ALERT_3_C Missing # of Very Strong Reflections in FCF ....
                                                                           5 Note
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Alert level G

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PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ... 76 Report PLAT012_ALERT_1_G N.O.K. _shelx_res_checksum Found in CIF ...... Please Check PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large 150.35 Why?
                                                                               76 Report
PLAT177_ALERT_4_G The CIF-Embedded .res File Contains DELU Records
                                                                              3 Report
PLAT178_ALERT_4_G The CIF-Embedded .res File Contains SIMU Records
                                                                                3 Report
PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records
                                                                                2 Report
PLAT395_ALERT_2_G Deviating X-O-Y Angle From 120 for O1
                                                                            110.9 Degree
PLAT395_ALERT_2_G Deviating X-O-Y Angle From 120 for O2
                                                                            109.7 Degree
PLAT432_ALERT_2_G Short Inter X...Y Contact I3 ...C27
                                                                             3.46 Ang.
                                            3/2-x,1/2+y,3/2-z = 2_656 Check
PLAT860_ALERT_3_G Number of Least-Squares Restraints .....
                                                                            1078 Note
PLAT870_ALERT_4_G ALERTS Related to Twinning Effects Suppressed ..
                                                                              ! Info
PLAT909_ALERT_3_G Percentage of I>2sig(I) Data at Theta(Max) Still
                                                                             86% Note
PLAT931_ALERT_5_G CIFcalcFCF Twin Law ( 0 0 1) Est.d BASF
                                                                             0.24 Check
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ...
                                                                              11 Note
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- 0 ALERT level A = Most likely a serious problem resolve or explain
- O ALERT level B = A potentially serious problem, consider carefully
- 10 ALERT level C = Check. Ensure it is not caused by an omission or oversight
- 14 ALERT level G = General information/check it is not something unexpected
- 2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 9 ALERT type 2 Indicator that the structure model may be wrong or deficient
- 8 ALERT type 3 Indicator that the structure quality may be low
- 4 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

