checkCIF/PLATON report

Structure factors have been supplied for datablock(s) shelx

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: shelx

Bond precision: C-C = 0.0058 A Wavelength=0.71073 Cell: a=31.799(2)b=6.3515(4)c=14.2176(10)alpha=90 beta=114.420(4) gamma=90 Temperature: 150 K Calculated Reported Volume 2614.7(3) 2614.6(3) C 2/c C 2/c Space group Hall group -C 2yc -C 2yc Moiety formula C14 H9 Br Cu N2 O3 C14 H9 Br Cu N2 O3 Sum formula C14 H9 Br Cu N2 O3 C14 H9 Br Cu N2 O3 Mr 396.68 396.68 2.015 2.015 Dx,g cm-3 Ζ 8 Mu (mm-1)4.737 4.737 F000 1560.0 1560.0 F000′ 1560.89 h,k,lmax 39,7,17 39,7,17 Nref 2672 2668 0.511,0.685 0.506,0.679 Tmin,Tmax Tmin' 0.422 Correction method= # Reported T Limits: Tmin=0.506 Tmax=0.679 AbsCorr = MULTI-SCAN Data completeness= 0.999 Theta(max) = 26.406 R(reflections) = 0.0385(1906) wR2(reflections) = 0.0740(2668) S = 1.014Npar= 194

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.

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Alert level C
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance .....
                                                                       2.252 Check
   Alert level G
PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension
                                                                           1 Info
PLAT066_ALERT_1_G Predicted and Reported Tmin&Tmax Range Identical
                                                                          ? Check
PLAT128_ALERT_4_G Alternate Setting for Input Space Group C2/c
                                                                        I2/a Note
                                                 --03_b
PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) Cul
                                                                        7.4 s.u.
PLAT794_ALERT_5_G Tentative Bond Valency for Cul
                                                      (II)
                                                                        2.19 Info
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min).
                                                                           1 Note
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                           3 Note
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ...
                                                                           1 Note
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                           3 Info
   0 ALERT level A = Most likely a serious problem - resolve or explain
   O ALERT level B = A potentially serious problem, consider carefully
   1 ALERT level C = Check. Ensure it is not caused by an omission or oversight
   9 ALERT level G = General information/check it is not something unexpected
   1 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
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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.

2 ALERT type 4 Improvement, methodology, query or suggestion

2 ALERT type 5 Informative message, check

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 shelx - ellipsoid plot

