checkCIF/PLATON report

Structure factors have been supplied for datablock(s) akmdb_a

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: akmdb_a

Bond precision: C-C = 0.0038 AWavelength=0.71073 a=8.5019(6) Cell: c=9.5689(6)b=31.998(2) beta=109.195(2) alpha=90 gamma=90 250 K Temperature: Calculated Reported Volume 2458.4(3)2458.4(3)Space group P 21/c P 21/c Hall group -P 2ybc -P 2ybc Moiety formula C31 H18 N2 O2, 3(H2 O) C31 H18 N2 O2, 3(H2 O) Sum formula C31 H24 N2 O5 C31 H24 N2 O5 Mr 504.52 504.52 1.363 1.363 Dx,g cm-3 Ζ 4 4 Mu (mm-1) 0.093 0.093 F000 1056.0 1056.0 F000′ 1056.51 h,k,lmax 10,41,12 10,41,12 Nref 5475 5448 Tmin, Tmax 0.944,0.953 Tmin′ Correction method= # Reported T Limits: Tmin=0.944 Tmax=0.953 AbsCorr = MULTI-SCAN Data completeness= 0.995 Theta(max) = 27.207wR2(reflections) = R(reflections) = 0.0511(3259)0.1926(5448) S = 0.950Npar= 371

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

PLAT053_ALERT_1_C Minimum Crystal Dimension Missing (or Error) ... Please Check PLAT054_ALERT_1_C Medium Crystal Dimension Missing (or Error) ... Please Check PLAT055_ALERT_1_C Maximum Crystal Dimension Missing (or Error) ... Please Check PLAT353_ALERT_3_C Long N-H (N0.87,N1.01A) N2 - H7 1.01 Ang. . — НЗВ PLAT355_ALERT_3_C Long O-H (X0.82,N0.98A) O3 1.07 Ang. PLAT905_ALERT_3_C Negative K value in the Analysis of Variance ... -8.945 Report PLAT905_ALERT_3_C Negative K value in the Analysis of Variance ... -0.558 Report PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600 11 Report 0 4 0, 2 4 0, 2 5 0, 0 6 0, 2 6 0, -2 5 1, -2 6 1, -2 7 1, 1 36 1, -1 2 2, -2 3 1, PLAT913_ALERT_3_C Missing # of Very Strong Reflections in FCF 7 Note 2 4 0, 2 5 0, 2 6 0, 0 1 1, -2 3 1, -2 5 1, -2 6 1,

Alert level G

PLAT333_ALERT_2_G Large Aver C6-Ring C-C Dist C1 -C14 .	1.42	Ang.
PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary .	Please	Do !
<pre>PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min).</pre>	2	Note
0 2 0, 0 1 1,		
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600	13	Note
<code>PLAT954_ALERT_1_G</code> Reported (CIF) and Actual (FCF) Kmax Differ by .	1	Units
PLAT965_ALERT_2_G The SHELXL WEIGHT Optimisation has not Converged	Please	Check
PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value	3.18	Note
Predicted wR2: Based on SigI**2 6.05 or SHELX Weight 2	1.00	
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.	0	Info

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0 ALERT level A = Most likely a serious problem - resolve or explain
0 ALERT level B = A potentially serious problem, consider carefully
9 ALERT level C = Check. Ensure it is not caused by an omission or oversight
8 ALERT level G = General information/check it is not something unexpected
5 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
7 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
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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.

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 06/01/2024; check.def file version of 05/01/2024



