checkCIF/PLATON report

You have not supplied any structure factors. As a result the full set of tests cannot be run.

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: tb3co4al12_sad

Bond precision: Tb-Al = 0.0015 Å Wavelength=0.71073 Å

Cell: a=8.661(1) b=8.661(1) c=9.282(1)
alpha=90 beta=90 gamma=120

Temperature: 293 K

Calculated Reported

Volume 602.99(18) 602.99(12)
Space group P 63/m m c P63/mmc
Hall group -P 6c 2c -P 6c 2c
Moiety formula Al23.72 Co8.28 Tb6 Al11.86 Co4.14 Tb3
Sum formula Al23.72 Co8.28 Tb6 Al11.86 Co4.14 Tb3
Mr 2081.36 1040.87
Dx, g cm⁻³ 5.732 5.733
Z 1 2
Mu (mm⁻¹) 23.718 23.727
F000 921.9 922.0
F000' 925.46
h,k,lmax 16,16,17 16,16,17
Nref 839 837
Tmin,Tmax 0.250,0.396 0.250,0.396
Tmin' 0.221

Correction method= # Reported T Limits: Tmin=0.250 Tmax=0.396
AbsCorr = MULTI-SCAN

Data completeness= 0.998 Theta(max)= 42.000
R(reflections)= 0.0264( 632) wR2(reflections)= 0.0561( 837)
S = 1.118 Npar= 28

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

**DIFMX02_ALERT_1_C** The maximum difference density is $> 0.1 \times Z_{\text{MAX}} \times 0.75$

The relevant atom site should be identified.

**PLAT077_ALERT_4_C** Unitcell contains non-integer number of atoms .. Please Check

**PLAT094_ALERT_2_C** Ratio of Maximum / Minimum Residual Density .... 2.21 Report

**PLAT097_ALERT_2_C** Large Reported Max. (Positive) Residual Density 5.76 eA-3

### Alert level G

**PLAT004_ALERT_5_G** Polymeric Structure Found with Maximum Dimension 3 Info

**PLAT005_ALERT_5_G** No Embedded Refinement Details found in the CIF Please Do !

**PLAT042_ALERT_1_G** Calc. and Reported MoietyFormula Strings Differ Please Check

**PLAT045_ALERT_1_G** Calculated and Reported Z Differ by a Factor ... 0.50 Check

**PLAT066_ALERT_1_G** Predicted and Reported Tmin&Tmax Range Identical ? Check

**PLAT068_ALERT_1_G** Reported F000 Differs from Calcd (or Missing)... Please Check

**PLAT152_ALERT_1_G** The Supplied and Calc. Volume s.u. Differ by ... 6 Units

**PLAT199_ALERT_1_G** Reported _cell_measurement_temperature ...... (K) 293 Check

**PLAT200_ALERT_1_G** Reported _diffrn_ambient_temperature ...... (K) 293 Check

**PLAT301_ALERT_3_G** Main Residue Disorder ..............(Resd 1).... 1 % Note

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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

**4 ALERT level C** = Check. Ensure it is not caused by an omission or oversight

**10 ALERT level G** = General information/check it is not something unexpected

**8 ALERT type 1 CIF construction/syntax error, inconsistent or missing data**

**2 ALERT type 2 Indicator that the structure model may be wrong or deficient**

**1 ALERT type 3 Indicator that the structure quality may be low**

**1 ALERT type 4 Improvement, methodology, query or suggestion**

**2 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 27/03/2017; check.def file version of 24/03/2017