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.

Datablock: I

```
Bond precision: C-C = 0.0127 A
                                       Wavelength=0.71073
Cell:
              a=10.0618(3) b=10.1653(3)
                                              c=27.0304(11)
              alpha=87.163(1) beta=85.001(1)
                                                qamma = 66.509(1)
Temperature:
              120 K
               Calculated
                                        Reported
Volume
               2525.60(15)
                                        2525.60(15)
                                        P -1
Space group
               P -1
Hall group
               -P 1
                                        -P 1
               C30 H40 Cd N4 O2, C15 H18 C30 H40 Cd N6 O2, C15 H18
Moiety formula
               N2, 2(Cl O4), C2 H6 O
                                        N2, 2(Cl O4), C2 H6 O
Sum formula
               C47 H64 Cd Cl2 N6 O11
                                        C47 H64 Cd Cl2 N6 O11
               1072.35
                                        1072.34
Mr
Dx,g cm-3
               1.410
                                        1.410
               2
                                        2
Mu (mm-1)
               0.601
                                        0.601
               1116.0
                                        1116.0
F000
F000′
               1115.44
h,k,lmax
               12,12,33
                                        12,12,33
Nref
               9941
                                        9645
                                        0.942,0.971
Tmin,Tmax
               0.951,0.970
Tmin'
               0.942
Correction method= # Reported T Limits: Tmin=0.942 Tmax=0.971
AbsCorr = MULTI-SCAN
Data completeness= 0.970 Theta(max)= 26.000
R(reflections) = 0.0908(6116) wR2(reflections) = 0.2206(9645)
S = 1.097
                         Npar= 608
```

Click on the hyperlinks for more details of the test.

Alert level G

FORMU01_ALERT_1_G There is a discrepancy between the atom counts in the _chemical_formula_sum and _chemical_formula_moiety. This is usually due to the moiety formula being in the wrong format. Atom count from _chemical_formula_sum: C47 H64 Cd1 Cl2 N6 O11 Atom count from _chemical_formula_moiety:C47 H64 Cd1 Cl2 N8 O11 PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ... 4 Report PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension 2 Info PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF Please Do !
PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms 5 Report
PLAT042_ALERT_1_G Calc. and Reported MoietyFormula Strings Differ Please Check 5 Report PLAT066_ALERT_1_G Predicted and Reported Tmin&Tmax Range Identical ? Check PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large. 20.69 Why ? PLAT154_ALERT_1_G The su's on the Cell Angles are Equal 0.00100 Degree PLAT244_ALERT_4_G Low 'Solvent' Ueq as Compared to Neighbors of Cl1 Check PLAT244_ALERT_4_G Low 'Solvent' Ueq as Compared to Neighbors of Cl2 Check PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 3 Do ! N11 -CD1 -N11 -C105 -165.00 5.00 2.655 1.555 1.555 PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 8 Do ! N11 -CD1 -N11 -C101 37.00 5.00 2.655 1.555 1.555 1.555 PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 15 Do ! N12 -CD2 -N12 -C113 -95.00 26.00 2.566 1.555 1.555 1.555 PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 20 Do ! N12 -CD2 -N12 -C114 78.00 26.00 2.566 1.555 1.555 1.555 PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 53 Do ! N21 -CD1 -N21 -C201 -107.00 15.00 2.655 1.555 1.555 1.555 PLAT710_ALERT_4_G Delete 1-2-3 or 2-3-4 Linear Torsion Angle ... # 58 Do ! N21 -CD1 -N21 -C205 61.00 15.00 2.655 1.555 1.555 1.555 PLAT860_ALERT_3_G Number of Least-Squares Restraints 24 Note

```
0 ALERT level A = Most likely a serious problem - resolve or explain
```

PLAT899_ALERT_4_G SHELXL97 is Deprecated and Succeeded by SHELXL

2014 Note

⁰ ALERT level B = A potentially serious problem, consider carefully

⁵ ALERT level C = Check. Ensure it is not caused by an omission or oversight

¹⁹ ALERT level G = General information/check it is not something unexpected

⁴ 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

⁴ ALERT type 3 Indicator that the structure quality may be low

¹⁰ ALERT type 4 Improvement, methodology, query or suggestion

³ 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*, 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 29/01/2015; check.def file version of 29/01/2015

