# checkCIF/PLATON report

No syntax errors found. **CIF** dictionary **Interpreting this report** 

## Datablock: jod1382s

Bond precision: C-C = 0.0073 A Wavelength=0.71073

Cell: a=12.9357(11) b=11.9801(12) c=13.0750(11)

> alpha=90 beta=100.862(2) gamma=90

Temperature: 100 K

Calculated Reported Volume 1989.9(3) 1989.9(3) Space group P 21 P2(1)

Hall group P 2yb

C36 H47 I N O4 P Pd, C H Moiety formula C13

Sum formula C37 H48 Cl3 I N O4 P Pd C37 H48 Cl3 I N O4 P Pd

941.38 941.38 Mr1.571 1.571 Dx,g cm-3  $\mathbf{z}$ 2 2 Mu (mm-1) 1.522 1.522 F000 948.0 948.0

F000' 946.44

h,k,lmax 17,16,17 17,16,17 5389[ 10300] Nref 9421

Tmin,Tmax 0.848,0.885 0.772,0.888

Tmin' 0.715

Correction method= MULTI-SCAN

Data completeness= 1.75/0.91 Theta(max)= 28.710

R(reflections) = 0.0422( 9000) wR2(reflections) = 0.0911( 9421)

S = 1.097Npar= 434

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 B

PLAT201\_ALERT\_2\_B Isotropic non-H Atoms in Main Residue(s) ...... 1 PLAT221\_ALERT\_2\_B Large Solvent/Anion Cl Ueq(max)/Ueq(min) ... 5.00 Ratio

### Alert level G

HYDTR01\_ALERT\_1\_G Extra text has been found in the \_refine\_ls\_hydrogen\_treatment fi Explanatory text should be in the \_publ\_section\_refinement field. Hydrogen treatment given as NH2 free, rigid methyls, others riding Hydrogen treatment identified as riding REFLT03\_ALERT\_4\_G Please check that the estimate of the number of Friedel pairs is correct. If it is not, please give the correct count in the \_publ\_section\_exptl\_refinement section of the submitted CIF. From the CIF: \_diffrn\_reflns\_theta\_max From the CIF: \_reflns\_number\_total 9421 Count of symmetry unique reflns 5389 Completeness (\_total/calc) 174.82% TEST3: Check Friedels for noncentro structure Estimate of Friedel pairs measured 4032 Fraction of Friedel pairs measured 0.748 Are heavy atom types Z>Si present yes PLAT002 ALERT 2 G Number of Distance or Angle Restraints on AtSite PLAT003\_ALERT\_2\_G Number of Uiso or Uij Restrained Atom Sites .... PLAT244 ALERT 4 G Low 'Solvent' Ueq as Compared to Neighbors of C99 PLAT302\_ALERT\_4\_G Note: Anion/Solvent Disorder ..... 100 Perc. PLAT720\_ALERT\_4\_G Number of Unusual/Non-Standard Labels ..... 2 PLAT791\_ALERT\_4\_G Note: The Model has Chirality at C7 (Verify) S PLAT860\_ALERT\_3\_G Note: Number of Least-Squares Restraints ...... 12

- 0 ALERT level A = Most likely a serious problem resolve or explain
- 2 **ALERT level B** = A potentially serious problem, consider carefully
- 2 **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
- 5 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
- 5 ALERT type 4 Improvement, methodology, query or suggestion
- O 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 16/02/2011; check.def file version of 16/02/2011

