

## 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: qj0761

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|                 |                                                 |                                            |
|-----------------|-------------------------------------------------|--------------------------------------------|
| Bond precision: | C-C = 0.0038 A                                  | Wavelength=0.71073                         |
| Cell:           | a=13.431(3)      b=8.8309(18)      c=7.7810(16) | alpha=90      beta=123.98(3)      gamma=90 |
| Temperature:    | 293 K                                           |                                            |
|                 | Calculated                                      | Reported                                   |
| Volume          | 765.3(4)                                        | 765.3(3)                                   |
| Space group     | C 2/m                                           | C2/m                                       |
| Hall group      | -C 2y                                           | ?                                          |
| Moiety formula  | C12 H16 O6 P2                                   | ?                                          |
| Sum formula     | C12 H16 O6 P2                                   | C12 H16 O6 P2                              |
| Mr              | 318.19                                          | 318.19                                     |
| Dx,g cm-3       | 1.381                                           | 1.381                                      |
| Z               | 2                                               | 2                                          |
| Mu (mm-1)       | 0.304                                           | 0.304                                      |
| F000            | 332.0                                           | 332.0                                      |
| F000'           | 332.59                                          |                                            |
| h,k,lmax        | 17,11,9                                         | 17,11,9                                    |
| Nref            | 892                                             | 881                                        |
| Tmin,Tmax       | 0.936,0.964                                     |                                            |
| Tmin'           | 0.932                                           |                                            |

Correction method= Not given

Data completeness= 0.988      Theta(max)= 26.980

R(reflections)= 0.0504( 807)      wR2(reflections)= 0.1416( 881)

S = 1.144      Npar= 60

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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 A**

PLAT417\_ALERT\_2\_A Short Inter D-H..H-D H1 .. H1 .. 0.90 Ang.

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**Alert level B**

PLAT241\_ALERT\_2\_B High Ueq as Compared to Neighbors for ..... C2 Check

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**Alert level C**

PLAT213\_ALERT\_2\_C Atom C2 has ADP max/min Ratio ..... 3.1 prolat  
PLAT220\_ALERT\_2\_C Large Non-Solvent C Ueq(max)/Ueq(min) Range 3.4 Ratio  
PLAT222\_ALERT\_3\_C Large Non-Solvent H Uiso(max)/Uiso(min) .. 4.9 Ratio  
PLAT242\_ALERT\_2\_C Low Ueq as Compared to Neighbors for ..... 01 Check  
PLAT250\_ALERT\_2\_C Large U3/U1 Ratio for Average U(i,j) Tensor .... 2.6 Note  
PLAT790\_ALERT\_4\_C Centre of Gravity not Within Unit Cell: Resd. # 1 Note  
C12 H16 O6 P2

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**Alert level G**

PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 2 Note  
PLAT005\_ALERT\_5\_G No \_iucr\_refine\_instructions\_details in the CIF Please Do !  
PLAT128\_ALERT\_4\_G Alternate Setting for Input Space Group C2/m I2/m Note  
PLAT199\_ALERT\_1\_G Reported \_cell\_measurement\_temperature ..... (K) 293 Check  
PLAT200\_ALERT\_1\_G Reported \_diffrn\_ambient\_temperature ..... (K) 293 Check  
PLAT860\_ALERT\_3\_G Number of Least-Squares Restraints ..... 1 Note  
PLAT899\_ALERT\_4\_G SHELXL97 is Deprecated and Succeeded by SHELXL 2014 Note

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

- 2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
  - 7 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
  - 3 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*, 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.

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**PLATON version of 20/08/2014; check.def file version of 18/08/2014**

