# 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: cu\_140630c\_0m

```
Bond precision: C-C = 0.0020 A
                                        Wavelength=1.54178
Cell:
                a=14.8444(2)
                                 b=10.0477(2)
                                                    c=8.0559(1)
                alpha=90
                                 beta=91.023(1)
                                                     gamma=90
Temperature:
                296 K
               Calculated
                                          Reported
Volume
               1201.36(3)
                                          1201.36(3)
Space group
               Pс
                                          РC
Hall group
               P -2yc
                                          P -2yc
Moiety formula C24 H32 O8
                                          C24 H32 O8
Sum formula
               C24 H32 O8
                                          C24 H32 O8
Mr
               448.50
                                          448.50
               1.240
                                          1.240
Dx,g cm-3
                2
Ζ
Mu (mm-1)
               0.768
                                          0.768
F000
               480.0
                                          480.0
F000′
               481.61
h,k,lmax
               18,12,9
                                          17,11,9
               4626[ 2319]
Nref
                                          3951
               0.891,0.912
                                          0.894,0.914
Tmin,Tmax
Tmin'
               0.891
Correction method= # Reported T Limits: Tmin=0.894 Tmax=0.914
AbsCorr = MULTI-SCAN
Data completeness= 1.70/0.85
                                 Theta(max) = 70.980
R(reflections) = 0.0334(3889)
                                 wR2(reflections) = 0.0911(3951)
S = 1.048
                          Npar= 297
```

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
PLAT029_ALERT_3_B _diffrn_measured_fraction_theta_full Low ...... 0.951 Note
   Alert level C
PLAT601_ALERT_2_C Structure Contains Solvent Accessible VOIDS of .
                                                                           32 Ang3
Alert level G
PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF Please Do !
PLAT066_ALERT_1_G Predicted and Reported Tmin&Tmax Range Identical
                                                                         ? Check
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels .....
                                                                           3 Note
PLAT792_ALERT_1_G The Model has Chirality at C7 (Polar SPGR)
                                                                           S Verify
PLAT792_ALERT_1_G The Model has Chirality at C7' (Polar SPGR)
                                                                          R Verify
PLAT792_ALERT_1_G The Model has Chirality at C8 (Polar SPGR)
PLAT792_ALERT_1_G The Model has Chirality at C8' (Polar SPGR)
                                                                          R Verify
                                                                           R Verify
PLAT899_ALERT_4_G SHELXL97 is Deprecated and Succeeded by SHELXL
                                                                       2014 Note
  0 ALERT level A = Most likely a serious problem - resolve or explain
  1 ALERT level B = A potentially serious problem, consider carefully
   1 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
  1 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
  2 ALERT type 4 Improvement, methodology, query or suggestion
   1 ALERT type 5 Informative message, check
```

#### Validation response form

Please find below a validation response form (VRF) that can be filled in and pasted into your CIF.

```
# start Validation Reply Form
_vrf_PLAT601_cu_140630c_0m
;
PROBLEM: Structure Contains Solvent Accessible VOIDS of . 32 Ang3
RESPONSE: ...
;
# end Validation Reply Form
```

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 21/06/2015; check.def file version of 21/06/2015

