# checkCIF/PLATON report

Structure factors have been supplied for datablock(s) ras1306\_squeeze

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: ras1306\_squeeze

```
Bond precision: C-C = 0.0060 A
                                        Wavelength=0.71073
Cell:
               a=13.3604(3)
                               b=8.8530(1)
                                                   c=16.6709(4)
               alpha=90
                               beta=95.0682(9)
                                                   gamma=90
Temperature:
                200 K
               Calculated
                                         Reported
Volume
               1964.12(7)
                                         1964.12(7)
Space group
              P 2/n
                                         P 1 2/n 1
Hall group
               -P 2yac
                                         -P 2yac
                                         C20 H32 C16 Cu4 N8 O
Moiety formula C20 H32 Cl6 Cu4 N8 O
Sum formula
               C20 H32 C16 Cu4 N8 O
                                         C20 H32 C16 Cu4 N8 O
Mr
               867.44
                                         867.43
               1.467
                                         1.467
Dx,g cm-3
               2
                                         2
Ζ
Mu (mm-1)
               2.569
                                         2.569
F000
               868.0
                                         868.0
F000′
               872.45
h,k,lmax
               17,11,21
                                         17,11,21
Nref
               4531
                                         4523
               0.742,0.835
                                         0.503,0.848
Tmin,Tmax
Tmin'
               0.320
Correction method= # Reported T Limits: Tmin=0.503 Tmax=0.848
AbsCorr = INTEGRATION
Data completeness= 0.998
                                 Theta(max) = 27.505
R(reflections) = 0.0426(4041) wR2(reflections) = 0.1077(4519)
S = 1.001
                          Npar= 182
```

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 A PLAT902\_ALERT\_1\_A N

PLAT902\_ALERT\_1\_A No (Interpretable) Reflections found in FCF .... Please Check

## Alert level C

PLAT241\_ALERT\_2\_C High 'MainMol' Ueq as Compared to Neighbors of Cl1 Check PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of Cu2 Check

## Alert level G

PLAT005\_ALERT\_5\_G No Embedded Refinement Details found in the CIF Please Do! PLAT007\_ALERT\_5\_G Number of Unrefined Donor-H Atoms ..... 2 Report PLAT083\_ALERT\_2\_G SHELXL Second Parameter in WGHT Unusually Large 5.02 Why ? PLAT232\_ALERT\_2\_G Hirshfeld Test Diff (M-X) Cu1 -- Cl1 ... 6.0 s.u. PLAT232\_ALERT\_2\_G Hirshfeld Test Diff (M-X) Cul -- Cl2\_a .. 17.4 s.u. PLAT300\_ALERT\_4\_G Atom Site Occupancy of \*Cl4 is Constrained at 0.5 Check PLAT301\_ALERT\_3\_G Main Residue Disorder ..... Percentage = 3 Note PLAT434\_ALERT\_2\_G Short Inter HL..HL Contact Cl3 .. Cl4 .. PLAT434\_ALERT\_2\_G Short Inter HL..HL Contact Cl3 .. Cl4 .. 3.28 Ang. 3.28 Ang. PLAT605\_ALERT\_4\_G Largest Solvent Accessible VOID in Structure ... 227 A\*\*3 PLAT764\_ALERT\_4\_G Overcomplete CIF Bond List Detected (Rep/Expd) . 1.16 Ratio PLAT869\_ALERT\_4\_G ALERTS Related to the use of SQUEEZE Suppressed ! Info

- 1 ALERT level A = Most likely a serious problem resolve or explain
- 0 ALERT level B = A potentially serious problem, consider carefully
- 2 ALERT level C = Check. Ensure it is not caused by an omission or oversight
- 12 ALERT level G = General information/check it is not something unexpected
- 1 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
- 1 ALERT type 3 Indicator that the structure quality may be low
- 4 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*, 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 19/11/2015; check.def file version of 17/11/2015

