# checkCIF/PLATON report

Structure factors have been supplied for datablock(s) inimsqbipy

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: inimsqbipy**

```
Wavelength=0.71073
Bond precision: C-C = 0.0129 A
Cell:
                   a=17.4861(16)
                                      b=23.472(2)
                                                     c=26.342(4)
                   alpha=90
                                      beta=90
                                                       gamma=90
Temperature:
                   298 K
                Calculated
                                            Reported
Volume
                10812(2)
                                            10812(2)
Space group
                Pbca
                                            Pbca
Hall group
                -P 2ac 2ab
                                            -P 2ac 2ab
                C54 H66 In N4 O2, 0.5(C6
                                            C54 H66 In N4 O2, 0.5(C6
Moiety formula
                H14)
                                            H14)
                C57 H73 In N4 O2
Sum formula
                                            C57 H73 In N4 O2
                961.01
                                            961.01
Dx,g cm-3
                1.181
                                            1.181
                0.479
                                            0.479
Mu (mm-1)
F000
                4064.0
                                            4064.0
F000'
                4059.45
                20,27,31
                                            20,27,31
h,k,lmax
Nref
                9547
                                            9532
                                            0.932,0.968
Tmin, Tmax
                0.913,0.962
Tmin'
                0.913
Correction method= # Reported T Limits: Tmin=0.932 Tmax=0.968
AbsCorr = ANALYTICAL
Data completeness= 0.998
                                   Theta (max) = 25.027
                                                      wR2 (reflections) =
R(reflections) = 0.0865(3263)
                                                      0.2356( 9532)
S = 1.005
                          Npar= 597
```

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

RINTA01\_ALERT\_3\_B The value of Rint is greater than 0.18 Rint given 0.207

Author Response: The reflectivity of crystal samples is rather low, the best single crystal suitable for SC XRD was chosen.

PLAT020\_ALERT\_3\_B The Value of Rint is Greater Than 0.12 ...... 0.207 Report

Author Response: The reflectivity of crystal samples is rather low, the best single crystal suitable for SC XRD was chosen.

PLAT026\_ALERT\_3\_B Ratio Observed / Unique Reflections (too) Low .. 34% Check

Author Response: The reflectivity of crystal samples is rather low, the best single crystal suitable for SC XRD was chosen.

#### Alert level C PLAT220\_ALERT\_2\_C NonSolvent Resd 1 C Ueq(max) / Ueq(min) Range 3.3 Ratio PLAT241\_ALERT\_2\_C High 'MainMol' Ueq as Compared to Neighbors of C39 Check 'MainMol' Ueq as Compared to Neighbors of PLAT242\_ALERT\_2\_C Low C7 Check 'MainMol' Ueq as Compared to Neighbors of C29 Check PLAT242\_ALERT\_2\_C Low PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of C38 Check 0.286 Check PLAT260\_ALERT\_2\_C Large Average Ueq of Residue Including C1S PLAT342\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.01292 Ang. PLAT906\_ALERT\_3\_C Large K Value in the Analysis of Variance ..... 49.853 Check PLAT906\_ALERT\_3\_C Large K Value in the Analysis of Variance ..... 7.281 Check PLAT906\_ALERT\_3\_C Large K Value in the Analysis of Variance ..... 2.640 Check PLAT911\_ALERT\_3\_C Missing FCF Refl Between Thmin & STh/L= 0.595 13 Report Alert level G PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 14 Note 3 Report PLAT003\_ALERT\_2\_G Number of Uiso or Uij Restrained non-H Atoms ... PLAT172\_ALERT\_4\_G The CIF-Embedded .res File Contains DFIX Records 2 Report PLAT176\_ALERT\_4\_G The CIF-Embedded .res File Contains SADI Records 1 Report PLAT177\_ALERT\_4\_G The CIF-Embedded .res File Contains DELU Records 2 Report PLAT187\_ALERT\_4\_G The CIF-Embedded .res File Contains RIGU Records 1 Report PLAT190\_ALERT\_3\_G A Non-default RIGU Restraint Value for First Par 0.0010 Report PLAT190\_ALERT\_3\_G A Non-default RIGU Restraint Value for SecondPar 0.0010 Report PLAT191\_ALERT\_3\_G A Non-default SADI Restraint Value has been used 0.0050 Report PLAT192\_ALERT\_3\_G A Non-default DELU Restraint Value for First Par 0.0010 Report PLAT192\_ALERT\_3\_G A Non-default DELU Restraint Value for SecondPar 0.0010 Report 0.0010 Report PLAT192\_ALERT\_3\_G A Non-default DELU Restraint Value for First Par

```
PLAT192_ALERT_3_G A Non-default DELU Restraint Value for SecondPar
                                                                 0.0010 Report
PLAT300_ALERT_4_G Atom Site Occupancy of C1S
                                             Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of C2S
                                                Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of C3S
                                                Constrained at
                                                                     0.5 Check
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of C4S
                                                Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of C5S
                                                Constrained at
                                                                     0.5 Check
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of C6S
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H1SA
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H1SB
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H1SC
                                                                     0.5 Check
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of H2SA
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H2SB
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H3SA
                                               Constrained at
                                                                     0.5 Check
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H3SB
PLAT300_ALERT_4_G Atom Site Occupancy of H4SA
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H4SB
                                                                     0.5 Check
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of H5SA
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H5SB
                                               Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H6SA
                                                                     0.5 Check
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of H6SB
                                                Constrained at
                                                                     0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H6SC
                                                Constrained at
                                                                    0.5 Check
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 2 )
                                                                    100% Note
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels .....
                                                                      14 Note
PLAT721_ALERT_1_G Bond Calc 0.96000, Rep 0.97000 Dev...
                                                                   0.01 Ang.
                                                               # 147 Check
             C4S
                     -H4SA
                                     1_555 1_555 ......
                                                                    0.01 Ang.
PLAT721_ALERT_1_G Bond
                      Calc
                                 0.96000, Rep
                                               0.97000 Dev...
                                     1_555 1_555 ......
                                                               # 151 Check
             C5S
                     -H5SB
PLAT721_ALERT_1_G Bond
                      Calc
                                 0.97000, Rep 0.96000 Dev...
                                                                    0.01 Ang.
                                     1_555 1_555 .....
             C6S -H6SB
                                                               # 153 Check
PLAT722_ALERT_1_G Angle Calc
                                109.00, Rep 107.70 Dev...
                                                                    1.30 Degree
                    -C5S -H5SB 1_555 1_555
                                                               # 280 Check
             C.6S
PLAT789_ALERT_4_G Atoms with Negative _atom_site_disorder_group #
                                                                      20 Check
PLAT860_ALERT_3_G Number of Least-Squares Restraints ......
                                                                     592 Note
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min).
                                                                      4 Note
PLAT913_ALERT_3_G Missing # of Very Strong Reflections in FCF ....
                                                                       2 Note
PLAT933_ALERT_2_G Number of HKL-OMIT Records in Embedded .res File
                                                                      10 Note
PLAT965_ALERT_2_G The SHELXL WEIGHT Optimisation has not Converged
                                                                 Please Check
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                       1 Info
```

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

<sup>3</sup> ALERT level B = A potentially serious problem, consider carefully

<sup>11</sup> ALERT level C = Check. Ensure it is not caused by an omission or oversight

<sup>46</sup> ALERT level G = General information/check it is not something unexpected

<sup>4</sup> ALERT type 1 CIF construction/syntax error, inconsistent or missing data

<sup>11</sup> ALERT type 2 Indicator that the structure model may be wrong or deficient

<sup>18</sup> ALERT type 3 Indicator that the structure quality may be low

<sup>27</sup> 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* or *IUCrData*, 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 28/11/2022; check.def file version of 28/11/2022

