

## 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: 30\_sq

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|                        |  |                                    |               |
|------------------------|--|------------------------------------|---------------|
| Bond precision:        | C-C = 0.0058 A                                 | Wavelength=0.71073                 |               |
| Cell:                  | a=7.8033(4)                                    | b=30.0645(18)                      | c=20.5938(10) |
|                        | alpha=90                                       | beta=93.545(4)                     | gamma=90      |
| Temperature:           | 293 K  |                                    |               |
|                        | Calculated                                     | Reported                           |               |
| Volume                 | 4822.1(4)                                      | 4822.1(4)                          |               |
| Space group            | I 2/c  | I 2/c                              |               |
| Hall group             | -I 2yc   | -I 2yc                             |               |
| Moiety formula         | C36 H34 Er N4 O14 Zn2, C2<br>H3 O2 [+ solvent] | C36 H34 Er N4 O14 Zn2, C2<br>H3 O2 |               |
| Sum formula            | C38 H37 Er N4 O16 Zn2 [+<br>solvent]           | C38 H37 Er N4 O16 Zn2              |               |
| Mr                     | 1103.76  | 1103.71                            |               |
| Dx, g cm <sup>-3</sup> | 1.520  | 1.520                              |               |
| Z                      | 4  | 4                                  |               |
| Mu (mm <sup>-1</sup> ) | 2.777  | 2.777                              |               |
| F000                   | 2196.0   | 2196.0                             |               |
| F000'                  | 2198.24  |                                    |               |
| h,k,lmax               | 10,40,27                                       | 10,40,25                           |               |
| Nref                   | 6327   | 5715                               |               |
| Tmin,Tmax              | 0.519,0.574                                    | 0.560,0.610                        |               |
| Tmin'                  | 0.508  |                                    |               |

Correction method= # Reported T Limits: Tmin=0.560 Tmax=0.610  
AbsCorr = MULTI-SCAN

Data completeness= 0.903      Theta(max)= 28.843

R(reflections)= 0.0309( 4642)      wR2(reflections)= 0.0945( 5715)

S = 1.017      Npar= 296

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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 C**

|                   |                              |     |        |   |           |
|-------------------|------------------------------|-----|--------|---|-----------|
| PLAT230_ALERT_2_C | Hirshfeld Test Diff for      | O2  | --C3   | . | 5.5 s.u.  |
| PLAT230_ALERT_2_C | Hirshfeld Test Diff for      | O7  | --C17  | . | 5.3 s.u.  |
| PLAT334_ALERT_2_C | Small Aver. Benzene C-C Dist | C14 | -C14_a |   | 1.36 Ang. |
| PLAT413_ALERT_2_C | Short Inter XH3 .. XHn       | H15 | ..H20A |   | 2.13 Ang. |
| PLAT413_ALERT_2_C | Short Inter XH3 .. XHn       | H15 | ..H20C |   | 2.11 Ang. |

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● **Alert level G**

|                   |  |        |                |   |              |
|-------------------|--|--------|----------------|---|--------------|
| PLAT002_ALERT_2_G | Number of Distance or Angle Restraints on AtSite |        |                |   | 3 Note       |
| PLAT003_ALERT_2_G | Number of Uiso or Uij Restrained non-H Atoms ... |        |                |   | 4 Report     |
| PLAT172_ALERT_4_G | The CIF-Embedded .res File Contains DFIX Records |        |                |   | 2 Report     |
| PLAT177_ALERT_4_G | The CIF-Embedded .res File Contains DELU Records |        |                |   | 1 Report     |
| PLAT199_ALERT_1_G | Reported _cell_measurement_temperature .....     | (K)    |                |   | 293 Check    |
| PLAT200_ALERT_1_G | Reported _diffrn_ambient_temperature .....       | (K)    |                |   | 293 Check    |
| PLAT232_ALERT_2_G | Hirshfeld Test Diff (M-X) Erl                    |        | --07           | . | 6.0 s.u.     |
| PLAT300_ALERT_4_G | Atom Site Occupancy of O8                        |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of O9                        |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of C19                       |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of C20                       |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of H20A                      |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of H20B                      |        | Constrained at |   | 0.5 Check    |
| PLAT300_ALERT_4_G | Atom Site Occupancy of H20C                      |        | Constrained at |   | 0.5 Check    |
| PLAT302_ALERT_4_G | Anion/Solvent/Minor-Residue Disorder (Resd 2 )   |        |                |   | 100% Note    |
| PLAT304_ALERT_4_G | Non-Integer Number of Atoms in .....             | Resd 2 |                |   | 3.50 Check   |
| PLAT395_ALERT_2_G | Deviating X-O-Y Angle From 120 for O3            |        |                |   | 109.9 Degree |
| PLAT395_ALERT_2_G | Deviating X-O-Y Angle From 120 for O4            |        |                |   | 111.4 Degree |
| PLAT605_ALERT_4_G | Largest Solvent Accessible VOID in the Structure |        |                |   | 366 A**3     |
| PLAT860_ALERT_3_G | Number of Least-Squares Restraints .....         |        |                |   | 4 Note       |
| PLAT869_ALERT_4_G | ALERTS Related to the Use of SQUEEZE Suppressed  |        |                |   | ! Info       |
| PLAT933_ALERT_2_G | Number of OMIT Records in Embedded .res File ... |        |                |   | 14 Note      |
| PLAT952_ALERT_5_G | Calculated (ThMax) and CIF-Reported Lmax Differ  |        |                |   | 2 Units      |

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

0 **ALERT level B** = A potentially serious problem, consider carefully

5 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight

23 **ALERT level G** = General information/check it is not something unexpected

2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data

11 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

13 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* 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.

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**PLATON version of 30/01/2018; check.def file version of 30/01/2018**

