

## 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: 2

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|                        |                      |                                      |
|------------------------|----------------------|--------------------------------------|
| Bond precision:        | C-C = 0.0129 Å       | Wavelength=0.71073                   |
| Cell:                  | a=9.1058(11)         | b=13.4278(13)      c=13.4369(13)     |
|                        | alpha=105.602(1)     | beta=102.410(1)      gamma=95.859(1) |
| Temperature:           | 298 K                |                                      |
|                        | Calculated           | Reported                             |
| Volume                 | 1522.9(3)            | 1522.9(3)                            |
| Space group            | P -1                 | P -1                                 |
| Hall group             | -P 1                 | -P 1                                 |
| Moiety formula         | C26 H32 Br4 N2 O2 Zn | ?                                    |
| Sum formula            | C26 H32 Br4 N2 O2 Zn | C26 H32 Br4 N2 O2 Zn                 |
| Mr                     | 789.53               | 789.54                               |
| Dx, g cm <sup>-3</sup> | 1.722                | 1.722                                |
| Z                      | 2                    | 2                                    |
| Mu (mm <sup>-1</sup> ) | 6.078                | 6.078                                |
| F000                   | 776.0                | 776.0                                |
| F000'                  | 774.66               |                                      |
| h, k, lmax             | 11, 16, 16           | 11, 16, 16                           |
| Nref                   | 5669                 | 5660                                 |
| Tmin, Tmax             | 0.348, 0.402         | 0.407, 0.463                         |
| Tmin'                  | 0.322                |                                      |

Correction method= # Reported T Limits: Tmin=0.407 Tmax=0.463  
AbsCorr = MULTI-SCAN

Data completeness= 0.998      Theta(max)= 25.500

|                               |                                 |
|-------------------------------|---------------------------------|
| R(reflections)= 0.0520( 2999) | wR2(reflections)= 0.1319( 5660) |
| S = 0.999                     | Npar= 316                       |

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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

|                   |  |              |
|-------------------|--|--------------|
| PLAT048_ALERT_1_C | MoietyFormula Not Given (or Incomplete) .....  | Please Check |
| PLAT220_ALERT_2_C | NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range    | 3.2 Ratio    |
| PLAT230_ALERT_2_C | Hirshfeld Test Diff for N1 --C7 .              | 5.1 s.u.     |
| PLAT234_ALERT_4_C | Large Hirshfeld Difference C4 --C5 .           | 0.16 Ang.    |
| PLAT234_ALERT_4_C | Large Hirshfeld Difference C11 --C12 .         | 0.18 Ang.    |
| PLAT234_ALERT_4_C | Large Hirshfeld Difference C12 --C13 .         | 0.17 Ang.    |
| PLAT234_ALERT_4_C | Large Hirshfeld Difference C17 --C18 .         | 0.18 Ang.    |
| PLAT234_ALERT_4_C | Large Hirshfeld Difference C23 --C24 .         | 0.19 Ang.    |
| PLAT241_ALERT_2_C | High 'MainMol' Ueq as Compared to Neighbors of | 01 Check     |
| PLAT241_ALERT_2_C | High 'MainMol' Ueq as Compared to Neighbors of | C25 Check    |
| PLAT242_ALERT_2_C | Low 'MainMol' Ueq as Compared to Neighbors of  | Zn1 Check    |
| PLAT242_ALERT_2_C | Low 'MainMol' Ueq as Compared to Neighbors of  | C8 Check     |
| PLAT341_ALERT_3_C | Low Bond Precision on C-C Bonds .....          | 0.01292 Ang. |
| PLAT360_ALERT_2_C | Short C(sp3)-C(sp3) Bond C24 - C25 .           | 1.42 Ang.    |

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### Alert level G

|                   |  |              |
|-------------------|--|--------------|
| PLAT007_ALERT_5_G | Number of Unrefined Donor-H Atoms .....          | 2 Report     |
| PLAT154_ALERT_1_G | The s.u.'s on the Cell Angles are Equal ..(Note) | 0.001 Degree |
| PLAT794_ALERT_5_G | Tentative Bond Valency for Zn1 (II) .            | 2.18 Info    |
| PLAT883_ALERT_1_G | No Info/Value for _atom_sites_solution_primary . | Please Do !  |
| PLAT941_ALERT_3_G | Average HKL Measurement Multiplicity .....       | 1.6 Low      |
| PLAT967_ALERT_5_G | Note: Two-Theta Cutoff Value in Embedded .res .. | 51.0 Degree  |

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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  
14 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
6 **ALERT level G** = General information/check it is not something unexpected
- 3 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  
5 ALERT type 4 Improvement, methodology, query or suggestion  
3 ALERT type 5 Informative message, check
- 

## checkCIF publication errors

### Alert level A

PUBL004\_ALERT\_1\_A The contact author's name and address are missing,  
\_publ\_contact\_author\_name and \_publ\_contact\_author\_address.  
PUBL005\_ALERT\_1\_A \_publ\_contact\_author\_email, \_publ\_contact\_author\_fax and  
\_publ\_contact\_author\_phone are all missing.  
At least one of these should be present.  
PUBL006\_ALERT\_1\_A \_publ\_requested\_journal is missing  
e.g. 'Acta Crystallographica Section C'

PUBL008\_ALERT\_1\_A \_publ\_section\_title is missing. Title of paper.  
PUBL009\_ALERT\_1\_A \_publ\_author\_name is missing. List of author(s) name(s).  
PUBL010\_ALERT\_1\_A \_publ\_author\_address is missing. Author(s) address(es).  
PUBL012\_ALERT\_1\_A \_publ\_section\_abstract is missing.  
Abstract of paper in English.



#### **Alert level G**

PUBL017\_ALERT\_1\_G The \_publ\_section\_references section is missing or empty.

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7 **ALERT level A** = Data missing that is essential or data in wrong format  
1 **ALERT level G** = General alerts. Data that may be required is missing

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### **Publication of your CIF**

You should 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 nature of your study may justify the reported deviations from journal submission requirements and the more serious of these should 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.

If level A alerts remain, which you believe to be justified deviations, and you intend to submit this CIF for publication in a journal, you should additionally insert an explanation in your CIF using the Validation Reply Form (VRF) below. This will allow your explanation to be considered as part of the review process.

### **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_PUBL004_GLOBAL
;
PROBLEM: The contact author's name and address are missing,
RESPONSE: ...
;
_vrf_PUBL005_GLOBAL
;
PROBLEM: _publ_contact_author_email, _publ_contact_author_fax and
RESPONSE: ...
;
_vrf_PUBL006_GLOBAL
;
```

```

PROBLEM: _publ_requested_journal is missing
RESPONSE: ...
;
_vrf_PUBL008_GLOBAL
;
PROBLEM: _publ_section_title is missing. Title of paper.
RESPONSE: ...
;
_vrf_PUBL009_GLOBAL
;
PROBLEM: _publ_author_name is missing. List of author(s) name(s).
RESPONSE: ...
;
_vrf_PUBL010_GLOBAL
;
PROBLEM: _publ_author_address is missing. Author(s) address(es).
RESPONSE: ...
;
_vrf_PUBL012_GLOBAL
;
PROBLEM: _publ_section_abstract is missing.
RESPONSE: ...
;
# end Validation Reply Form

```

If you wish to submit your CIF for publication in Acta Crystallographica Section C or E, you should upload your CIF via the web. If you wish to submit your CIF for publication in IUCrData you should upload your CIF via the web. If your CIF is to form part of a submission to another IUCr journal, you will be asked, either during electronic submission or by the Co-editor handling your paper, to upload your CIF via our web site.

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**PLATON version of 28/11/2022; check.def file version of 09/08/2022**

