# 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: I**

Bond precision: C-C = 0.0039 A Wavelength=0.71073 Cell: a=13.9356(18) b=12.7072(16)c=13.0672(16)alpha=90 beta=116.187(2) gamma=90 Temperature: 298 K Calculated Reported Volume 2076.5(5) 2076.5(5) Space group P 21/c P21/c Hall group -P 2ybc Moiety formula C17 H14 Mn N5 O7 S, H2 O ? Sum formula C17 H16 Mn N5 O8 S C17 H16 Mn N5 O8 S Mr 505.35 505.35 1.617 1.617 Dx,g cm-3 Ζ 4 Mu (mm-1)0.793 0.793 F000 1032.0 1032.0 F000′ 1034.32 h,k,lmax 17,16,16 17,16,16 Nref 4532 4516 0.807,0.840 0.814,0.845 Tmin,Tmax Tmin' 0.807 Correction method= # Reported T Limits: Tmin=0.814 Tmax=0.845 AbsCorr = MULTI-SCAN Data completeness= 0.996 Theta(max) = 27.000 R(reflections) = 0.0411(3623) wR2(reflections) = 0.1294(4516) S = 1.050Npar= 301

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 C PLAT048\_ALERT\_1\_C MoietyFormula Not Given (or Incomplete) ...... PLAT125\_ALERT\_4\_C No '\_symmetry\_space\_group\_name\_Hall' Given .... Please Check Please Do ! 'MainMol' Ueq as Compared to Neighbors of N3 Check PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of PLAT242\_ALERT\_2\_C Low C17 Check Smaller than U(eq) 08 PLAT245\_ALERT\_2\_C U(iso) H8C by ... 0.050 AngSq PLAT245\_ALERT\_2\_C U(iso) H8D by ... Smaller than U(eq) 08 0.050 AngSq PLAT480\_ALERT\_4\_C Long H...A H-Bond Reported H3B .. 01 . . 2.61 Ang. Alert level G PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 6 Note PLAT005\_ALERT\_5\_G No Embedded Refinement Details found in the CIF Please Do ! -- C17 .. PLAT230\_ALERT\_2\_G Hirshfeld Test Diff for N5 8.5 s.u. PLAT860\_ALERT\_3\_G Number of Least-Squares Restraints ..... 6 Note 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 0 ALERT level B = A potentially serious problem, consider carefully 7 ALERT level C = Check. Ensure it is not caused by an omission or oversight 5 ALERT level G = General information/check it is not something unexpected

- O ALERT level B = A potentially serious problem, consider carefully
  ALERT level C = Check. Ensure it is not caused by an omission or oversight
  ALERT level G = General information/check it is not something unexpected

  1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
  ALERT type 2 Indicator that the structure model may be wrong or deficient
  ALERT type 3 Indicator that the structure quality may be low
  ALERT type 4 Improvement, methodology, query or suggestion
  ALERT type 5 Informative message, check
- checkCIF publication errors

## Alert level A

#### Alert level G

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

- 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

#### **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.

### PLATON version of 27/03/2017; check.def file version of 24/03/2017

Datablock I - ellipsoid plot

