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 = 0.0057 A
                                       Wavelength=0.71073
Cell:
              a=9.7299(8) b=11.1554(10)
                                               c=11.4937(11)
              alpha=69.303(1) beta=88.575(1)
                                                qamma = 88.952(1)
Temperature:
              298 K
               Calculated
                                         Reported
Volume
               1166.60(18)
                                         1166.60(18)
Space group
              P -1
                                         P -1
Hall group
               -P 1
                                         -P 1
Moiety formula C22 H17 Br2 N2 O7 V
Sum formula
             C22 H17 Br2 N2 O7 V
                                         C22 H17 Br2 N2 O7 V
Mr
               632.12
                                         632.13
               1.799
                                         1.800
Dx,g cm-3
               2
Ζ
                                         2
Mu (mm-1)
               3.897
                                         3.897
F000
               624.0
                                         624.0
F000′
               623.75
h,k,lmax
               11,13,13
                                         11,13,13
Nref
               4346
                                         4312
               0.311,0.363
                                         0.349,0.746
Tmin,Tmax
Tmin'
               0.287
Correction method= # Reported T Limits: Tmin=0.349 Tmax=0.746
AbsCorr = MULTI-SCAN
Data completeness= 0.992
                                 Theta(max) = 25.500
R(reflections) = 0.0399(3227) wR2(reflections) = 0.0924(4312)
S = 1.048
                         Npar= 309
```

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

PLAT431_ALERT_2_B Short Inter HL..A Contact Br1 ..07 . 2.96 Ang. $-1+x,y,1+z = 1_456 \text{ Check}$

Alert level C

PLAT048_ALERT_1_C MoietyFormula Not Given (or Incomplete) Please Check

Alert level G

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 V1 (V) . 5.24 Info PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary . PLAT941_ALERT_3_G Average HKL Measurement Multiplicity 2.5 Low PLAT965_ALERT_2_G The SHELXL WEIGHT Optimisation has not Converged Please Check

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

- 1 ALERT level B = A potentially serious problem, consider carefully
- 1 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
- 3 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 2 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
- 0 ALERT type 4 Improvement, methodology, query or suggestion
- 1 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 18/09/2020; check.def file version of 20/08/2020

Datablock I - ellipsoid plot

