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: marc002

```
Bond precision: C-C = 0.0075 A
                                       Wavelength=1.54178
Cell:
               a=6.8349(3)
                              b=7.3672(3)
                                                  c=18.3255(8)
                alpha=90
                              beta=100.593(2)
                                                  gamma=90
Temperature:
                200 K
               Calculated
                                         Reported
Volume
               907.04(7)
                                         907.04(7)
Space group
              P 21
                                         P 21
Hall group
              P 2yb
                                         P 2yb
Moiety formula C20 H17 Br O4
Sum formula
             C20 H17 Br O4
                                        C20 H17 Br O4
Mr
               401.24
                                         401.24
               1.469
                                         1.469
Dx,g cm-3
               2
Ζ
Mu (mm-1)
               3.269
                                         3.269
                                         408.0
F000
               408.0
F000′
               407.73
h,k,lmax
               8,9,22
                                         8,9,22
               3737[ 2019]
Nref
                                         3698
               0.268,0.755
                                         0.461,0.754
Tmin,Tmax
Tmin'
               0.198
Correction method= # Reported T Limits: Tmin=0.461 Tmax=0.754
AbsCorr = MULTI-SCAN
Data completeness= 1.83/0.99 Theta(max)= 74.779
R(reflections) = 0.0441(3523) wR2(reflections) = 0.1214(3698)
S = 1.114
                         Npar= 232
```

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
PLAT090_ALERT_3_C Poor Data / Parameter Ratio (Zmax > 18) ......
                                                                           8.70 Note
PLAT341 ALERT 3 C Low Bond Precision on C-C Bonds .....
                                                                          0.0075 Ang.
  Alert level G
PLAT791_ALERT_4_G The Model has Chirality at C1 (Chiral SPGR)
PLAT791 ALERT 4 G The Model has Chirality at C5 (Chiral SPGR)
                                                                              S Verify
PLAT791_ALERT_4_G The Model has Chirality at C5
                                                                               S Verify
                                                       (Chiral SPGR)
   O ALERT level A = Most likely a serious problem - resolve or explain
   O ALERT level B = A potentially serious problem, consider carefully
   2 ALERT level C = Check. Ensure it is not caused by an omission or oversight
   2 ALERT level G = General information/check it is not something unexpected
   O ALERT type 1 CIF construction/syntax error, inconsistent or missing data
   O 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
   2 ALERT type 4 Improvement, methodology, query or suggestion
   0 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*, 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.

