checkCIF/PLATON report

Structure factors have been supplied for datablock(s) mo_dd19210_0m

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: mo_dd19210_0m

```
Bond precision: C-C = 0.0030 A
                                        Wavelength=0.71073
Cell:
              a=6.1532(3)
                                b=13.1141(6)
                                                c=15.5713(8)
              alpha=109.057(2)
                                beta=90.519(2)
                                                 qamma = 99.450(2)
Temperature: 293 K
               Calculated
                                         Reported
Volume
               1168.88(10)
                                         1168.87(10)
Space group
                                         P -1
              P -1
Hall group
               -P 1
                                         -P 1
Moiety formula C29 H23 N5
                                         ?
Sum formula
             C29 H23 N5
                                         C29 H23 N5
Mr
               441.52
                                         441.52
               1.255
                                         1.254
Dx,g cm-3
               2
Ζ
Mu (mm-1)
               0.076
                                         0.076
F000
               464.0
                                         464.0
F000′
               464.15
h,k,lmax
               7,15,18
                                         7,15,18
Nref
               4366
                                         4348
               0.991,0.996
                                         0.629,0.746
Tmin,Tmax
Tmin'
               0.989
Correction method= # Reported T Limits: Tmin=0.629 Tmax=0.746
AbsCorr = MULTI-SCAN
Data completeness= 0.996
                                 Theta(max) = 25.495
R(reflections) = 0.0480(3140) wR2(reflections) = 0.1240(4348)
S = 1.050
                          Npar= 310
```

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

```
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance ..... 5.064 Check PLAT910_ALERT_3_C Missing # of FCF Reflection(s) Below Theta(Min). 5 Note PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600 13 Report PLAT913_ALERT_3_C Missing # of Very Strong Reflections in FCF .... 10 Note
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Alert level G

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PLAT154_ALERT_1_G The s.u.'s on the Cell Angles are Equal ..(Note)
                                                                     0.002 Degree
PLAT199_ALERT_1_G Reported _cell_measurement_temperature ..... (K)
                                                                       293 Check
PLAT200_ALERT_1_G Reported __diffrn_ambient_temperature ..... (K)
                                                                        293 Check
                                                 - C18 .
PLAT371_ALERT_2_G Long C(sp2)-C(sp1) Bond C7
                                                                       1.43 Ang.
PLAT371_ALERT_2_G Long C(sp2)-C(sp1) Bond C19
                                                    - C20
                                                                       1.43 Ang.
{\tt PLAT883\_ALERT\_1\_G~No~Info/Value~for~\_atom\_sites\_solution\_primary~.}
                                                                     Please Do !
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                         1 Note
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ...
                                                                          2 Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity .....
                                                                       3.9 Low
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                          2 Info
PLAT992_ALERT_5_G Repd & Actual _reflns_number_gt Values Differ by
                                                                          2 Check
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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
- 4 ALERT level C = Check. Ensure it is not caused by an omission or oversight
- 11 ALERT level G = General information/check it is not something unexpected
- 4 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 4 ALERT type 2 Indicator that the structure model may be wrong or deficient
- 5 ALERT type 3 Indicator that the structure quality may be low
- 1 ALERT type 4 Improvement, methodology, query or suggestion
- 1 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* 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.

PLATON version of 13/07/2021; check.def file version of 13/07/2021

