checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 241112zyd_3_muban

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: 241112zyd_3_muban

```
Bond precision: C-C = 0.0066 A
                                         Wavelength=0.71073
Cell:
                  a=6.1503(2)
                                 b=16.9911(7)
                                                    c=20.2854(8)
                                  beta=90
                  alpha=90
                                                    gamma=90
                  296 K
Temperature:
                Calculated
                                          Reported
                                          2119.83(14)
Volume
               2119.83(14)
Space group
              P 21 21 21
                                          P 21 21 21
                                         P 2ac 2ab
Hall group
            P 2ac 2ab
Moiety formula C24 H25 N O S
                                         C24 H25 N O S
                                          C24 H25 N O S
Sum formula
              C24 H25 N O S
Mr
               375.51
                                          375.51
              1.177
                                          1.177
Dx,g cm-3
                4
Mu (mm-1)
              0.165
                                          0.165
F000
               800.0
                                          800.0
F000'
               800.78
h,k,lmax
               7,22,26
                                          7,22,26
                                          4822
Nref
               4849[ 2789]
Tmin, Tmax
               0.972,0.992
                                          0.682,0.746
Tmin'
                0.972
Correction method= # Reported T Limits: Tmin=0.682 Tmax=0.746
AbsCorr = MULTI-SCAN
Data completeness= 1.73/0.99 Theta(max)= 27.477
                                                    wR2 (reflections) =
R(reflections) = 0.0604(3025)
                                                    0.1409( 4822)
S = 1.034
                         Npar= 278
```

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
PLAT242_ALERT_2_C Low
                      'MainMol' Ueq as Compared to Neighbors of
                                                                    C11 Check
PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of
                                                                    C14 Check
PLAT242_ALERT_2_C Low
                    'MainMol' Ueq as Compared to Neighbors of
                                                                   C18 Check
PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds .....
                                                                0.00662 Ang.
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance .....
                                                                  3.474 Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                                      5 Report
                                                     0 3 3,
              1 2 1, 1 0 2, 0 3 2, 0 4 2,
PLAT913_ALERT_3_C Missing # of Very Strong Reflections in FCF ....
                                                                      5 Note
              1 2 1, 1 0 2, 0 3 2, 0 4 2, 0 3 3,
Alert level G
PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite
                                                                      7 Note
                                                                      7 Report
                                                                      3 Report
                                                                      1 Report
                                                                 0.0100 Report
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PLAT003_ALERT_2_G Number of Uiso or U(i,j) Restrained non-H Atoms ${\tt PLAT176_ALERT_4_G\ The\ CIF-Embedded\ .res\ File\ Contains\ SADI\ Records}$ ${\tt PLAT178_ALERT_4_G\ The\ CIF-Embedded\ .res\ File\ Contains\ SIMU\ Records}$ PLAT188_ALERT_3_G A Non-default SIMU Restraint Value has been used PLAT301_ALERT_3_G Main Residue Disorder(Resd 1) 11% Note PLAT860_ALERT_3_G Number of Least-Squares Restraints 75 Note PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min). 4 Note 0 2 0, 0 1 1, 0 0 2, 0 1 2, PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600 1 Note PLAT933_ALERT_2_G Number of HKL-OMIT Records in Embedded .res File 0 0 2, 0 1 1, 0 1 2, PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value 2.788 Note Predicted wR2: Based on SigI**2 5.05 or SHELX Weight 13.63 PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density. 0 Info

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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
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⁷ **ALERT level C** = Check. Ensure it is not caused by an omission or oversight

¹² ALERT level G = General information/check it is not something unexpected

⁰ 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 8 ALERT type 3 Indicator that the structure quality may be low

³ 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 22/08/2024; check.def file version of 21/08/2024

