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: shelx

Bond precision: C-C = 0.0079 A Wavelength=0.71073 Cell: a=6.8467(7)b=17.8766(15)c=14.0167(13)alpha=90 beta=90 gamma=90 Temperature: 296 K Calculated Reported Volume 1715.6(3) 1715.6(3) Space group P 21 21 21 P 21 21 21 Hall group P 2ac 2ab P 2ac 2ab Moiety formula C19 H19 N3 O2 Sum formula C19 H19 N3 O2 C19 H19 N3 O2 Mr 321.37 321.37 Dx,g cm-3 1.244 1.244 Ζ 4 Mu (mm-1)0.083 0.083 F000 680.0 680.0 F000′ 680.27 h,k,lmax 9,23,18 9,23,18 4250[2439] 4247 Nref Tmin, Tmax Tmin' Correction method= Not given Data completeness= 1.74/1.00 Theta(max) = 28.281 R(reflections) = 0.0559(1588) wR2(reflections) = 0.1310(4247) S = 0.808Npar= 220

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 A EXPT005_ALERT_1_A _exptl_crystal_description is missing Crystal habit description. The following tests will not be performed. CRYSR_01 DIFF003_ALERT_1_A __diffrn_measurement_device_type is missing Diffractometer make and type. Replaces _diffrn_measurement_type. PLAT183_ALERT_1_A Missing _cell_measurement_reflns_used Value PLAT184_ALERT_1_A Missing _cell_measurement_theta_min Value Please Do ! PLAT185_ALERT_1_A Missing _cell_measurement_theta_max Value Please Do ! PLAT699_ALERT_1_A Missing _exptl_crystal_description Value Please Do ! 🖳 Alert level B RINTA01_ALERT_3_B The value of Rint is greater than 0.18 Rint given 0.242 PLAT026_ALERT_3_B Ratio Observed / Unique Reflections (too) Low .. 37% Check Alert level C STRVA01_ALERT_4_C Flack parameter is too small From the CIF: _refine_ls_abs_structure_Flack -0.500 From the CIF: refine ls abs structure Flack su 1.000 PLAT052_ALERT_1_C Info on Absorption Correction Method Not Given Please Do! PLAT053_ALERT_1_C Minimum Crystal Dimension Missing (or Error) ... Please Check PLAT054_ALERT_1_C Medium Crystal Dimension Missing (or Error) ... Please Check PLAT055_ALERT_1_C Maximum Crystal Dimension Missing (or Error) ... Please Check PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds 0.00794 Ang. Alert level G 0.242 Report PLAT020_ALERT_3_G The Value of Rint is Greater Than 0.12 PLAT032_ALERT_4_G Std. Uncertainty on Flack Parameter Value High . 1.000 Report PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary . Please Do ! PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ... 2 Note 6 ALERT level A = Most likely a serious problem - resolve or explain 2 ALERT level B = A potentially serious problem, consider carefully 6 ALERT level C = Check. Ensure it is not caused by an omission or oversight 4 ALERT level G = General information/check it is not something unexpected

- 11 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 1 ALERT type 2 Indicator that the structure model may be wrong or deficient
- 4 ALERT type 3 Indicator that the structure quality may be low
- $2\ \mbox{ALERT}$ type $4\ \mbox{Improvement},$ 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* 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 22/04/2020; check.def file version of 09/03/2020

