

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) I

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.

No syntax errors found. CIF dictionary Interpreting this report

Datablock: I

Bond precision:	C-C = 0.0056 A	Wavelength=0.71075
Cell:	a=11.7178(13) b=36.427(4) c=16.1388(17)	alpha=90 beta=104.503(7) gamma=90
Temperature:	100 K	
	Calculated	Reported
Volume	6669.2(13)	6669.2(12)
Space group	P 21/n	P 1 21/n 1
Hall group	-P 2yn	-P 2yn
Moiety formula	C22 H26 Fe N4 O2, 2(C24 H20 B), C5 H4 N, C6 H16 N	C22 H26 Fe N4 O2, 2(C24 H20 B), C5 H4 N, C6 H16 N
Sum formula	C81 H86 B2 Fe N6 O2	C81 H86 B2 Fe N6 O2
Mr	1253.03	1253.03
Dx, g cm ⁻³	1.248	1.248
Z	4	4
Mu (mm ⁻¹)	0.280	0.280
F000	2664.0	2664.0
F000'	2666.24	
h,k,lmax	15,47,21	15,47,20
Nref	15414	13100
Tmin,Tmax	0.917,0.986	0.375,0.972
Tmin'	0.863	

Correction method= # Reported T Limits: Tmin=0.375 Tmax=0.972
AbsCorr = MULTI-SCAN

Data completeness= 0.850 Theta(max)= 27.559

R(reflections)= 0.0645(8277) wR2(reflections)= 0.2157(13100)

S = 1.057 Npar= 836

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

PLAT214_ALERT_2_B Atom C38 (Anion/Solvent) ADP max/min Ratio 5.9 prolat

Author Response: Reflections were only observed at low angles because cations and anions and lattice molecules are loosely packed within the crystal lattice (Few reflections were observed at high angles.). This led to low data completeness (0.850). Thus, the alert of ADP appeared.

PLAT230_ALERT_2_B Hirshfeld Test Diff for C51 --C52 . 8.3 s.u.

Author Response: For the same reason as PLAT214, this alert generated.

Alert level C

PLAT230_ALERT_2_C Hirshfeld Test Diff for C14 --C15 . 6.5 s.u.

Author Response: For the same reason as PLAT214, this alert generated.

PLAT230_ALERT_2_C Hirshfeld Test Diff for C25 --C26 . 6.5 s.u.

Author Response: For the same reason as PLAT214, this alert generated.

PLAT230_ALERT_2_C Hirshfeld Test Diff for C53 --C58 . 6.0 s.u.

Author Response: For the same reason as PLAT214, this alert generated.

PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor 2.8 Note

PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor 2.3 Note

Alert level G

PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension 1 Info
PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms 1 Report
PLAT012_ALERT_1_G N.O.K. _shelx_res_checksum Found in CIF Please Check
PLAT019_ALERT_1_G _diffrn_measured_fraction_theta_full/*_max < 1.0 0.996 Report
PLAT072_ALERT_2_G SHELXL First Parameter in WGHT Unusually Large 0.11 Report
PLAT432_ALERT_2_G Short Inter X...Y Contact C54 ..C75 3.19 Ang.
1/2-x,1/2+y,3/2-z = 2_556 Check
PLAT882_ALERT_1_G No Datum for _diffrn_reflns_av_unetI/netI Please Do !
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity 1.8 Low

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- 0 **ALERT level A** = Most likely a serious problem - resolve or explain
2 **ALERT level B** = A potentially serious problem, consider carefully
5 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
8 **ALERT level G** = General information/check it is not something unexpected
- 3 ALERT type 1 CIF construction/syntax error, inconsistent or missing data

9 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
2 ALERT type 5 Informative message, check

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 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 04/06/2020; check.def file version of 02/06/2020

