

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) mo_1030_cg_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.

No syntax errors found. CIF dictionary Interpreting this report

Datablock: mo_1030_cg_0m

Bond precision: C-C = 0.0022 A

Wavelength=0.71073

Cell: a=9.2828(11) b=9.6552(16) c=15.772(3)
 alpha=72.401(5) beta=89.249(8) gamma=78.000(7)
Temperature: 100 K

	Calculated	Reported
Volume	1316.1(4)	1316.1(3)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C23 H46 Fe O P4	C23 H46 Fe O P4
Sum formula	C23 H46 Fe O P4	C23 H46 Fe O P4
Mr	518.33	518.33
Dx,g cm-3	1.308	1.308
Z	2	2
Mu (mm-1)	0.829	0.829
F000	556.0	556.0
F000'	557.62	
h,k,lmax	12,13,21	12,13,21
Nref	7435	7411
Tmin,Tmax	0.839,0.889	0.294,0.324
Tmin'	0.824	

Correction method= # Reported T Limits: Tmin=0.294 Tmax=0.324
AbsCorr = MULTI-SCAN

Data completeness= 0.997

Theta(max)= 29.636

R(reflections)= 0.0327(6929)

wR2(reflections)= 0.0824(7411)

S = 1.045

Npar= 273

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

PLAT094_ALERT_2_C	Ratio of Maximum / Minimum Residual Density ...	2.55	Report
PLAT220_ALERT_2_C	NonSolvent Resd 1 C Ueq(max) / Ueq(min) Range	3.5	Ratio
PLAT242_ALERT_2_C	Low 'MainMol' Ueq as Compared to Neighbors of		P1 Check

● Alert level G

PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X) Fe1 --P2	.	7.5 s.u.
PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X) Fe1 --P3	.	5.9 s.u.
PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X) Fe1 --P4	.	8.0 s.u.
PLAT793_ALERT_4_G	Model has Chirality at C7 (Centro SPGR)		S Verify
PLAT910_ALERT_3_G	Missing # of FCF Reflection(s) Below Theta(Min).		1 Note
PLAT912_ALERT_4_G	Missing # of FCF Reflections Above STh/L= 0.600		24 Note
PLAT933_ALERT_2_G	Number of OMIT Records in Embedded .res File ...		2 Note
PLAT978_ALERT_2_G	Number C-C Bonds with Positive Residual Density.		6 Info
PLAT992_ALERT_5_G	Repd & Actual _reflns_number_gt Values Differ by		1 Check

- 0 **ALERT level A** = Most likely a serious problem - resolve or explain
0 **ALERT level B** = A potentially serious problem, consider carefully
3 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
9 **ALERT level G** = General information/check it is not something unexpected

- 0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
8 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
2 ALERT type 4 Improvement, methodology, query or suggestion
1 ALERT type 5 Informative message, check
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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 04/06/2020; check.def file version of 02/06/2020

Datablock mo_1030_cg_0m - ellipsoid plot

