

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) mo_1021_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_1021_cg_0m

Bond precision:	C-C = 0.0040 A	Wavelength=0.71073	
Cell:	a=10.3448(7)	b=15.4459(10)	c=28.2821(19)
	alpha=90	beta=90	gamma=90
Temperature:	100 K		
	Calculated	Reported	
Volume	4519.1(5)	4519.0(5)	
Space group	P b c a	P b c a	
Hall group	-P 2ac 2ab	-P 2ac 2ab	
Moiety formula	C15 H41 Fe P5	C15 H41 Fe P5	
Sum formula	C15 H41 Fe P5	C15 H41 Fe P5	
Mr	432.18	432.18	
Dx,g cm-3	1.270	1.270	
Z	8	8	
Mu (mm-1)	1.016	1.016	
F000	1856.0	1856.0	
F000'	1863.07		
h,k,lmax	14,21,39	14,21,39	
Nref	6363	6341	
Tmin,Tmax	0.802,0.947	0.203,0.258	
Tmin'	0.729		

Correction method= # Reported T Limits: Tmin=0.203 Tmax=0.258
AbsCorr = MULTI-SCAN

Data completeness= 0.997 Theta(max)= 29.623

R(reflections)= 0.0451(5579) wR2(reflections)= 0.1295(6341)

S = 1.157 Npar= 201

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	3.596	Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600	5	Report



Alert level G

PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large	13.29	Why ?
PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) Fel --P1 .	6.0	s.u.
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	16	Note
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File ...	5	Note
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.	0	Info
PLAT992_ALERT_5_G Repd & Actual _reflns_number_gt Values Differ by	1	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
 2 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
 7 **ALERT level G** = General information/check it is not something unexpected
- 0 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
 3 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
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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_1021_cg_0m - ellipsoid plot

