checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 1

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: 1

Bond precision:	C-C = 0.0146 A	Ţ	Wavelength:	=0.71073
Cell:	a=7.4137(6)			c=13.5172(11)
Temperature:	alpha=90 173 K	beta=105.04	17 (3)	gamma=90
-				
	Calculated		Reported	
Volume	2112.8(3)		2112.8(3)	
Space group	P 21/c		P 21/c	
Hall group	-P 2ybc		-P 2ybc	
Moiety formula	C24 H22 Fe3 N14 8(H2 O)	06 Pt3,	C24 H22 F 8 (H2 O)	e3 N14 O6 Pt3,
Sum formula	C24 H38 Fe3 N14	014 Pt3	C24 H38 F	e3 N14 O14 Pt3
Mr	1499.47		1499.50	
Dx,g cm-3	2.357		2.357	
Z	2		2	
Mu (mm-1)	10.971		10.971	
F000	1408.0		1408.0	
F000'	1401.06			
h,k,lmax	8,26,16		8,26,16	
Nref	3860		3842	
Tmin, Tmax	0.363,0.645		0.521,0.7	45
Tmin'	0.185			
Correction method= # Reported T Limits: Tmin=0.521 Tmax=0.745 AbsCorr = MULTI-SCAN				
Data completenes	ss= 0.995	Theta(ma	ax) = 25.341	L
R(reflections) =	0.0388(2581)			wR2(reflections) = 0.0627(3842)
S = 1.022	Npar=	300		0.002/(3042)
0 1.022	Mpar-	500		

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
PLAT213 ALERT 2 C Atom N4
                                    has ADP max/min Ratio .....
                                                                      3.3 prolat
PLAT213_ALERT_2_C Atom C5
                                    has ADP max/min Ratio .....
                                                                       3.2 prolat
                                                                   0.0146 Ang.
PLAT342_ALERT_3_C Low Bond Precision on C-C Bonds .....
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance .....
                                                                     5.513 Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                                        12 Report
PLAT977_ALERT_2_C Check Negative Difference Density on H3A
                                                                      -0.41 \text{ eA}-3
PLAT977_ALERT_2_C Check Negative Difference Density on H3B
                                                                      -0.37 \text{ eA}-3
PLAT977_ALERT_2_C Check Negative Difference Density on H5A
                                                                      -0.32 eA-3
PLAT977_ALERT_2_C Check Negative Difference Density on H10
                                                                     -0.34 eA-3
PLAT977_ALERT_2_C Check Negative Difference Density on H12A
                                                                      -0.62 \text{ eA}-3
PLAT977_ALERT_2_C Check Negative Difference Density on H5C
                                                                      -0.53 eA-3
Alert level G
PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite
                                                                          3 Note
PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ...
                                                                         8 Report
PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension
                                                                         2 Info
PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms ......
                                                                        14 Report
PLAT172_ALERT_4_G The CIF-Embedded .res File Contains DFIX Records
                                                                          1 Report
PLAT178_ALERT_4_G The CIF-Embedded .res File Contains SIMU Records
                                                                         1 Report
PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records
                                                                         2 Report
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 2 )
                                                                      100% Note
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 4 )
                                                                      100% Note
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 5 )
                                                                      100% Note
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 6 )
                                                                      100% Note
                                                                      100% Note
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 7 )
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 8 )
                                                                      100% Note
PLAT417_ALERT_2_G Short Inter D-H..H-D
                                          H2B ..H6A .
                                                                       2.12 Ang.
                                         -1+x, 1/2-y, -1/2+z =
                                                                  4_465 Check
PLAT417_ALERT_2_G Short Inter D-H..H-D
                                                                       2.13 Ang.
                                           нза
                                                  ..H6D
                                                 -1+x,y,z =
                                                                  1_455 Check
PLAT780_ALERT_1_G Coordinates do not Form a Properly Connected Set
                                                                   Please Do !
PLAT794_ALERT_5_G Tentative Bond Valency for Pt1
                                                                      2.20 Info
                                                 (II)
PLAT804_ALERT_5_G Number of ARU-Code Packing Problem(s) in PLATON
                                                                         2 Info
PLAT860_ALERT_3_G Number of Least-Squares Restraints ......
                                                                         92 Note
{\tt PLAT883\_ALERT\_1\_G~No~Info/Value~for~\_atom\_sites\_solution\_primary~.}
                                                                     Please Do !
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min).
                                                                          4 Note
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                          2 Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity ......
                                                                        3.2 Low
PLAT965_ALERT_2_G The SHELXL WEIGHT Optimisation has not Converged
                                                                     Please Check
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                          0 Info
```

```
0 ALERT level A = Most likely a serious problem - resolve or explain
```

⁰ ALERT level B = A potentially serious problem, consider carefully

¹¹ ALERT level C = Check. Ensure it is not caused by an omission or oversight

²⁵ **ALERT level G** = General information/check it is not something unexpected

² ALERT type 1 CIF construction/syntax error, inconsistent or missing data

```
14 ALERT type 2 Indicator that the structure model may be wrong or deficient 6 ALERT type 3 Indicator that the structure quality may be low 10 ALERT type 4 Improvement, methodology, query or suggestion 4 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 13/07/2021; check.def file version of 13/07/2021

