checkCIF/PLATON report

Datablock: klat634

Bond precision:	C-C = 0.0024 A	Wavelength=0.71073

Cell: a=22.341(7) b=22.341(7) c=22.341(7)

alpha=90 beta=90 gamma=90

Temperature: 120 K

Calculated Reported
Volume 11151(6) 11151(6)
Space group I -4 3 d I-43d
Hall group I -4bd 2c 3 ?
Moiety formula C25 H43 B Fe N6 ?

Sum formula C25 H43 B Fe N6 C25 H43 B Fe N6

Mr 494.31 494.31 Dx,g cm-3 1.178 1.178 Z 16 16 Mu (mm-1) 0.564 0.564

F000 4256.0 4256.0 F000' 4262.40

h,k,lmax 29,29,29 29,29,29 Nref 1243[2313] 2315

Tmin, Tmax 0.812, 0.914 0.818, 0.915

Tmin' 0.812

Correction method= MULTI-SCAN

Data completeness= 1.86/1.00 Theta(max)= 28.290

R(reflections) = 0.0334(2168) wR2(reflections) = 0.0837(2315)

S = 1.078 Npar= 106

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 2.37 PLAT232_ALERT_2_C Hirshfeld Test Diff (M-X) Fe -- C9 .. 7.97 su

Alert level G

REFLT03_ALERT_4_G Please check that the estimate of the number of Friedel pairs is

```
correct. If it is not, please give the correct count in the
           _publ_section_exptl_refinement section of the submitted CIF.
          From the CIF: _diffrn_reflns_theta_max
                                                         28.29
          From the CIF: _reflns_number_total
                                                         2315
                                               1243
          Count of symmetry unique reflns
          Completeness (_total/calc)
                                             186.24%
          TEST3: Check Friedels for noncentro structure
          Estimate of Friedel pairs measured
          Fraction of Friedel pairs measured
                                               0.862
          Are heavy atom types Z>Si present yes
PLAT764_ALERT_4_G Overcomplete CIF Bond List Detected (Rep/Expd) .
                                                                1.13 Ratio
```

```
O ALERT level A = In general: serious problem

O ALERT level B = Potentially serious problem

ALERT level C = Check and explain

ALERT level G = General alerts; check

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

ALERT type 2 Indicator that the structure model may be wrong or deficient

ALERT type 3 Indicator that the structure quality may be low

ALERT type 4 Improvement, methodology, query or suggestion

O ALERT type 5 Informative message, check
```

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*, 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 31/03/2010; check.def file version of 22/03/2010

