

checkCIF/PLATON report

You have not supplied any structure factors. As a result the full set of tests cannot be run.

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: 170527g

Bond precision: C-C = 0.0187 Å Wavelength=0.71073

Cell: a=14.3011(13) b=34.231(3) c=19.5141(17)
 alpha=90 beta=106.873(3) gamma=90

Temperature: 298 K

	Calculated	Reported
Volume	9141.7(14)	9141.7(14)
Space group	P 21/n	P 21/n
Hall group	-P 2yn	-P 2yn
Moiety formula	2(C76 H56 Dy Fe4 N8 O20), 7(C5 H5 N), 2(C5 H6 N)	?
Sum formula	C197 H159 Dy2 Fe8 N25 O40	C98.50 H79.50 Dy Fe4 N12.50 O20
Mr	4288.30	2144.14
Dx, g cm ⁻³	1.558	1.558
Z	2	4
Mu (mm ⁻¹)	1.507	1.507
F000	4352.0	4352.0
F000'	4358.43	
h,k,lmax	17,40,23	16,40,23
Nref	16130	16090
Tmin,Tmax	0.546,0.656	0.550,0.678
Tmin'	0.503	

Correction method= # Reported T Limits: Tmin=0.550 Tmax=0.678
AbsCorr = MULTI-SCAN

Data completeness= 0.998 Theta(max)= 25.020

R(reflections)= 0.0706(10256) wR2(reflections)= 0.1846(16090)

S = 1.047 Npar= 1225

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

CRYSC01_ALERT_1_C No recognised colour has been given for crystal colour.

PLAT220_ALERT_2_C	Non-Solvent Resd 1 C	Ueq(max)/Ueq(min) Range	3.8	Ratio
PLAT230_ALERT_2_C	Hirshfeld Test Diff for N7	--C71	5.6	s.u.
PLAT234_ALERT_4_C	Large Hirshfeld Difference N8	--C76	0.16	Ang.
PLAT234_ALERT_4_C	Large Hirshfeld Difference C68	--C69	0.16	Ang.
PLAT234_ALERT_4_C	Large Hirshfeld Difference N13	--C97	0.19	Ang.
PLAT234_ALERT_4_C	Large Hirshfeld Difference C97	--C98	0.19	Ang.
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C69	Check	
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C70	Check	
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C75	Check	
PLAT243_ALERT_4_C	High 'Solvent' Ueq as Compared to Neighbors of	C97	Check	
PLAT243_ALERT_4_C	High 'Solvent' Ueq as Compared to Neighbors of	C99	Check	
PLAT243_ALERT_4_C	High 'Solvent' Ueq as Compared to Neighbors of	C94	Check	
PLAT243_ALERT_4_C	High 'Solvent' Ueq as Compared to Neighbors of	C90	Check	
PLAT244_ALERT_4_C	Low 'Solvent' Ueq as Compared to Neighbors of	C95	Check	
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor	2.5	Note	
PLAT331_ALERT_2_C	Small Average Phenyl C-C Dist C37	-C42	1.37	Ang.
PLAT342_ALERT_3_C	Low Bond Precision on C-C Bonds	0.01869	Ang.	
PLAT368_ALERT_2_C	Short C(sp2)-C(sp2) Bond C87	- C88	1.17	Ang.
PLAT411_ALERT_2_C	Short Inter H...H Contact H92	..H97	2.03	Ang.
PLAT411_ALERT_2_C	Short Inter H...H Contact H96	..H99	2.09	Ang.

● Alert level G

PLAT002_ALERT_2_G	Number of Distance or Angle Restraints on AtSite	11	Note	
PLAT003_ALERT_2_G	Number of Uiso or Uij Restrained non-H Atoms ...	137	Report	
PLAT007_ALERT_5_G	Number of Unrefined Donor-H Atoms	1	Report	
PLAT045_ALERT_1_G	Calculated and Reported Z Differ by a Factor ...	0.50	Check	
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large	56.19	Why ?	
PLAT171_ALERT_4_G	The CIF-Embedded .res File Contains EADP Records	1	Report	
PLAT172_ALERT_4_G	The CIF-Embedded .res File Contains DFIX Records	3	Report	
PLAT174_ALERT_4_G	The CIF-Embedded .res File Contains FLAT Records	1	Report	
PLAT178_ALERT_4_G	The CIF-Embedded .res File Contains SIMU Records	1	Report	
PLAT300_ALERT_4_G	Atom Site Occupancy of N13	Constrained at	0.5	Check
PLAT300_ALERT_4_G	Atom Site Occupancy of C98	Constrained at	0.5	Check
PLAT300_ALERT_4_G	Atom Site Occupancy of H98	Constrained at	0.5	Check
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 2)	27%	Note	
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C97	- C99_a	1.53	Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact N12	..C97	2.56	Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact N12	..C99	2.65	Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact C92	..C97	3.05	Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact C96	..C99	3.16	Ang.
PLAT794_ALERT_5_G	Tentative Bond Valency for Dy1	(II)	2.10	Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Fe1	(III)	3.02	Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Fe2	(III)	3.05	Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Fe3	(III)	3.08	Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Fe4	(III)	3.03	Info
PLAT860_ALERT_3_G	Number of Least-Squares Restraints	4033	Note	

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

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

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

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

2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
18 ALERT type 2 Indicator that the structure model may be wrong or deficient
2 ALERT type 3 Indicator that the structure quality may be low
17 ALERT type 4 Improvement, methodology, query or suggestion
6 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 23/04/2018; check.def file version of 23/04/2018

