

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) exp15v3_293k_auto_a

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: exp15v3_293k_auto_a

Bond precision:	C-C = 0.0049 Å	Wavelength=1.54184	
Cell:	a=6.6111(6)	b=8.1247(5)	c=10.0546(4)
	alpha=89.986(4)	beta=85.856(5)	gamma=82.196(7)
Temperature:	293 K		

	Calculated	Reported
Volume	533.64(6)	533.64(6)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C ₈ H ₉ N O ₂ , C ₂ H ₃ N	C ₈ H ₉ N O ₂ , C ₂ H ₃ N
Sum formula	C ₁₀ H ₁₂ N ₂ O ₂	C ₁₀ H ₁₂ N ₂ O ₂
Mr	192.22	192.22
D _x , g cm ⁻³	1.196	1.196
Z	2	2
μ (mm ⁻¹)	0.697	0.697
F ₀₀₀	204.0	204.0
F _{000'}	204.64	
h, k, lmax	7, 9, 11	7, 9, 11
Nref	1889	1862
Tmin, Tmax	0.778, 0.858	0.126, 1.000
Tmin'	0.706	

Correction method= # Reported T Limits: Tmin=0.126 Tmax=1.000
AbsCorr = MULTI-SCAN

Data completeness= 0.986 Theta (max)= 66.736

R(reflections)= 0.1015(1333)	wR2 (reflections)= 0.2545(1862)
S = 1.040	Npar= 175

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

RINTA01_ALERT_3_C	The value of Rint is greater than 0.12	
	Rint given 0.142	
PLAT020_ALERT_3_C	The Value of Rint is Greater Than 0.12	0.142 Report
PLAT242_ALERT_2_C	Low 'MainMol' Ueq as Compared to Neighbors of	C10 Check
PLAT250_ALERT_2_C	Large U3/U1 Ratio for <U(i,j)> Tensor(Resd 1)	2.3 Note
PLAT260_ALERT_2_C	Large Average Ueq of Residue Including N2	0.111 Check
PLAT340_ALERT_3_C	Low Bond Precision on C-C Bonds	0.00487 Ang.
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	96.197 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	3.431 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	28.638 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	3.011 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	4.442 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	2.504 Check
PLAT906_ALERT_3_C	Large K Value in the Analysis of Variance	4.296 Check
PLAT911_ALERT_3_C	Missing FCF Refl Between Thmin & STh/L= 0.596	27 Report
	-7 2 0, -7 3 0, -7 1 1, -7 2 1, 7 -3 2, -7 0 2,	
	-7 1 2, -6 1 2, -7 2 2, 7 -2 3, -7 0 3, 7 0 3,	
	-7 1 3, -6 1 3, -6 2 3, -6 3 3, -6 4 3, -7 -1 4,	
	-7 0 4, -6 2 4, -6 3 4, 7 1 5, -6 2 5, -6 3 5,	
	7 2 6, -5 -2 7, 6 4 7,	

● Alert level G

PLAT002_ALERT_2_G	Number of Distance or Angle Restraints on AtSite	19 Note
PLAT172_ALERT_4_G	The CIF-Embedded .res File Contains DFIX Records	1 Report
PLAT176_ALERT_4_G	The CIF-Embedded .res File Contains SADI Records	4 Report
PLAT199_ALERT_1_G	Reported _cell_measurement_temperature (K)	293 Check
PLAT200_ALERT_1_G	Reported _diffrn_ambient_temperature (K)	293 Check
PLAT860_ALERT_3_G	Number of Least-Squares Restraints	40 Note
PLAT909_ALERT_3_G	Percentage of I>2sig(I) Data at Theta(Max) Still	33% Note
PLAT969_ALERT_5_G	The 'Henn et al.' R-Factor-gap value	6.204 Note
	Predicted wR2: Based on SigI**2 4.10 or SHELX Weight 24.47	
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

14 **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

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

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

13 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

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 11/11/2024; check.def file version of 11/11/2024

Datablock exp15v3_293k_auto_a - ellipsoid plot

