

# 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: hy

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Bond precision:    C-C = 0.0073 A                      Wavelength=1.54184

Cell:                      a=10.4511(2)              b=13.2462(2)              c=16.0310(2)  
                            alpha=81.564(1)          beta=83.322(1)          gamma=83.508(1)  
Temperature:    200 K

	Calculated	Reported
Volume	2169.95(6)	2169.95(6)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	2(C32 H45 B20 N), 2(C H C13), C C13	C H C13, 0.5(C C13), C32 H45 B20 N
Sum formula	C67 H92 B40 C19 N2	C33.50 H46 B20 C14.50 N
Mr	1676.88	838.44
Dx,g cm-3	1.283	1.283
Z	1	2
Mu (mm-1)	2.961	2.961
F000	861.0	861.0
F000'	865.82	
h,k,lmax	12,16,19	12,16,19
Nref	8697	8311
Tmin,Tmax		0.259,1.000
Tmin'		

Correction method= # Reported T Limits: Tmin=0.259 Tmax=1.000  
AbsCorr = MULTI-SCAN

Data completeness= 0.956                      Theta(max)= 73.293

R(reflections)= 0.1071( 6767)              wR2(reflections)= 0.2627( 8311)

S = 1.082                      Npar= 551

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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 B

PLAT260\_ALERT\_2\_B Large Average Ueq of Residue Including C11A 0.188 Check

### Alert level C

DIFMN02\_ALERT\_2\_C The minimum difference density is < -0.1\*ZMAX\*0.75

\_refine\_diff\_density\_min given = -1.498

Test value = -1.275

DIFMN03\_ALERT\_1\_C The minimum difference density is < -0.1\*ZMAX\*0.75

The relevant atom site should be identified.

DIFMX02\_ALERT\_1\_C The maximum difference density is > 0.1\*ZMAX\*0.75

The relevant atom site should be identified.

PLAT053_ALERT_1_C	Minimum Crystal Dimension Missing (or Error) ...	Please Check
PLAT054_ALERT_1_C	Medium Crystal Dimension Missing (or Error) ...	Please Check
PLAT055_ALERT_1_C	Maximum Crystal Dimension Missing (or Error) ...	Please Check
PLAT082_ALERT_2_C	High R1 Value .....	0.11 Report
PLAT084_ALERT_3_C	High wR2 Value (i.e. > 0.25) .....	0.26 Report
PLAT097_ALERT_2_C	Large Reported Max. (Positive) Residual Density	1.65 eA-3
PLAT098_ALERT_2_C	Large Reported Min. (Negative) Residual Density	-1.50 eA-3
PLAT213_ALERT_2_C	Atom C7 has ADP max/min Ratio .....	3.4 oblate
PLAT260_ALERT_2_C	Large Average Ueq of Residue Including C11	0.109 Check
PLAT340_ALERT_3_C	Low Bond Precision on C-C Bonds .....	0.00729 Ang.

### Alert level G

PLAT003_ALERT_2_G	Number of Uiso or Uij Restrained non-H Atoms ...	2 Report
PLAT012_ALERT_1_G	No _shelx_res_checksum Found in CIF .....	Please Check
PLAT042_ALERT_1_G	Calc. and Reported MoietyFormula Strings Differ	Please Check
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	14.07 Why ?
PLAT153_ALERT_1_G	The s.u.'s on the Cell Axes are Equal ..(Note)	0.0002 Ang.
PLAT154_ALERT_1_G	The s.u.'s on the Cell Angles are Equal ..(Note)	0.001 Degree
PLAT186_ALERT_4_G	The CIF-Embedded .res File Contains ISOR Records	2 Report
PLAT300_ALERT_4_G	Atom Site Occupancy of C11A Constrained at	0.5 Check
PLAT300_ALERT_4_G	Atom Site Occupancy of C10A Constrained at	0.5 Check
PLAT300_ALERT_4_G	Atom Site Occupancy of C13 Constrained at	0.5 Check
PLAT300_ALERT_4_G	Atom Site Occupancy of C0AA Constrained at	0.5 Check
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 3 )	100% Note
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C17 Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C18 Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C19 Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C20 Check
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C17 - C18 .	1.74 Ang.
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C18 - C21 .	1.51 Ang.
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C19 - C20 .	1.73 Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact C11A ..C0AA	1.58 Ang.
	2-x,2-y,-z =	2_775 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C10A ..C0AA	2.05 Ang.
	2-x,2-y,-z =	2_775 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C13 ..C0AA	1.62 Ang.
	2-x,2-y,-z =	2_775 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C0AA ..C0AA	1.09 Ang.
	2-x,2-y,-z =	2_775 Check
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels .....	23 Note
PLAT773_ALERT_2_G	Check long C-C Bond in CIF: C17 --C18	1.74 Ang.
PLAT773_ALERT_2_G	Check long C-C Bond in CIF: C19 --C20	1.73 Ang.

PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle in CIF	....	#	12	Check
	C0AA -CLOA -C0AA	1.555 1.555 2.775		32.10	Deg.
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle in CIF	....	#	477	Check
	C0AA -CL1A -C0AA	2.775 1.555 1.555		37.90	Deg.
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle in CIF	....	#	483	Check
	C0AA -CL3 -C0AA	1.555 1.555 2.775		40.40	Deg.
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle in CIF	....	#	490	Check
	CL1A -C0AA -CL3	2.775 1.555 2.775		38.50	Deg.
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle in CIF	....	#	496	Check
	CL3 -C0AA -CL1A	1.555 1.555 1.555		36.70	Deg.
PLAT860_ALERT_3_G	Number of Least-Squares Restraints	.....		12	Note

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0 **ALERT level A** = Most likely a serious problem - resolve or explain  
 1 **ALERT level B** = A potentially serious problem, consider carefully  
 13 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
 33 **ALERT level G** = General information/check it is not something unexpected

10 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
 22 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  
 12 ALERT type 4 Improvement, methodology, query or suggestion  
 0 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.

