

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) A20195O_004

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: A20195O_004

Bond precision:	C-C = 0.0131 A	Wavelength=0.71073
Cell:	a=14.5216(8)	b=12.2531(8) c=18.2279(12)
	alpha=90	beta=107.513(5) gamma=90
Temperature:	173 K	
	Calculated	Reported
Volume	3093.0(3)	3093.0(3)
Space group	P 21	P 21
Hall group	P 2yb	P 2yb
Moiety formula	C18 H34 B10 Br Cl3 O2 Si2	?
Sum formula	C18 H34 B10 Br Cl3 O2 Si2	C18 H34 B10 Br Cl3 O2 Si2
Mr	632.98	632.99
Dx,g cm-3	1.359	1.359
Z	4	4
Mu (mm-1)	1.683	1.683
F000	1288.0	1288.0
F000'	1289.54	
h,k,lmax	17,15,22	17,15,22
Nref	12154[6379]	11989
Tmin,Tmax	0.593,0.769	0.363,0.992
Tmin'	0.562	

Correction method= # Reported T Limits: Tmin=0.363 Tmax=0.992
AbsCorr = MULTI-SCAN

Data completeness= 1.88/0.99 Theta(max)= 25.999

R(reflections)= 0.0698(7620) wR2(reflections)= 0.1193(11989)

S = 1.024 Npar= 667

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

PLAT242_ALERT_2_C	Low	'MainMol' Ueq as Compared to Neighbors of	C33	Check
PLAT242_ALERT_2_C	Low	'MainMol' Ueq as Compared to Neighbors of	C83	Check
PLAT334_ALERT_2_C	Small	Aver. Benzene C-C Dist C72 -C77	1.37	Ang.
PLAT341_ALERT_3_C	Low	Bond Precision on C-C Bonds	0.0131	Ang.
PLAT906_ALERT_3_C	Large	K Value in the Analysis of Variance	3.907	Check
PLAT911_ALERT_3_C	Missing	FCF Refl Between Thmin & STh/L= 0.600	28	Report



Alert level G

PLAT164_ALERT_4_G	Nr. of Refined C-H H-Atoms in Heavy-Atom Struct.	2	Note
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C1	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C2	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C51	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for	C52	Check
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C1 - C2	1.73	Ang.
PLAT367_ALERT_2_G	Long? C(sp?)-C(sp?) Bond C51 - C52	1.71	Ang.
PLAT773_ALERT_2_G	Check long C-C Bond in CIF: C1 --C2	1.73	Ang.
PLAT773_ALERT_2_G	Check long C-C Bond in CIF: C51 --C52	1.71	Ang.
PLAT791_ALERT_4_G	Model has Chirality at C21 (Sohnke SpGr)	R	Verify
PLAT791_ALERT_4_G	Model has Chirality at C71 (Sohnke SpGr)	R	Verify
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).	3	Note
PLAT912_ALERT_4_G	Missing # of FCF Reflections Above STh/L= 0.600	8	Note
PLAT933_ALERT_2_G	Number of OMIT Records in Embedded .res File ...	2	Note
PLAT941_ALERT_3_G	Average HKL Measurement Multiplicity	4.1	Low
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
6 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
17 **ALERT level G** = General information/check it is not something unexpected
- 1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
13 ALERT type 2 Indicator that the structure model may be wrong or deficient
5 ALERT type 3 Indicator that the structure quality may be low
4 ALERT type 4 Improvement, methodology, query or suggestion
0 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.

