

checkCIF (basic structural check) running

Checking for embedded fcf data in CIF ...

Found embedded fcf data in CIF. Extracting fcf data from uploaded CIF, please wait

checkCIF/PLATON (basic structural check)

Structure factors have been supplied for datablock(s) CuBr-BisM

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](#)

Please wait while processing [Interpreting this report](#)

Structure factor report

Datablock: CuBr-BisM

Bond precision:	C-C = 0.0071 Å		Wavelength=0.71073
Cell:	a=15.7124(2)	b=25.0060(3)	c=36.9047(5)
	alpha=90	beta=90	gamma=90
Temperature: 123 K			
	Calculated	Reported	
Volume	14500.0(3)	14500.0(3)	
Space group	P b c a	P b c a	
Hall group	-P 2ac 2ab	-P 2ac 2ab	
Moiety formula	C75 H66 Br2 Cu3 P6, C4 H10 O, Br	C75 H66 Br2 Cu3 P6, Br, C4 H10 O	
Sum formula	C79 H76 Br3 Cu3 O P6	C79 H76 Br3 Cu3 O P6	
Mr	1657.57	1657.56	
Dx, g cm-3	1.519	1.519	
Z	8	8	
Mu (mm-1)	2.703	2.703	
F000	6720.0	6720.0	
F000'	6727.40		
h, k, lmax	21, 34, 50	21, 34, 49	
Nref	19517	19341	
Tmin, Tmax	0.547, 0.729	0.889, 1.000	
Tmin'	0.536		
Correction method= # Reported T Limits: Tmin=0.889 Tmax=1.000 AbsCorr = MULTI-SCAN			
Data completeness= 0.991	Theta(max)= 29.130		
R(reflections)= 0.0577(13921)	wR2(reflections)= 0.1362(19341)		
S = 1.056	Npar= 878		

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

[PLAT042_ALERT_1_C](#) Calc. and Reported MoietyFormula Strings Differ Please Check

Calc: C75 H66 Br2 Cu3 P6, C4 H10 O, Br

Rep.: C75 H66 Br2 Cu3 P6, Br, C4 H10 O

[PLAT260_ALERT_2_C](#) Large Average Ueq of Residue Including O1A 0.142 Check

[PLAT260_ALERT_2_C](#) Large Average Ueq of Residue Including O1B 0.117 Check

[PLAT341_ALERT_3_C](#) Low Bond Precision on C-C Bonds 0.00713 Å.

[PLAT906_ALERT_3_C](#) Large K Value in the Analysis of Variance 8.241 Check

[PLAT906_ALERT_3_C](#) Large K Value in the Analysis of Variance 2.128 Check

[PLAT911_ALERT_3_C](#) Missing FCF Refl Between Thmin & STh/L= 0.600 18 Report

2 1 0, 0 16 0, 1 2 3, 1 3 4, 0 2 6, 0 0 8,
0 0 42, 0 2 42, 1 1 43, 0 2 43, 0 4 43, 0 6 43,
0 0 44, 1 0 44, 1 1 44, 0 2 44, 1 2 44, 1 3 44,

[PLAT971_ALERT_2_C](#) Check Calcd Resid. Dens. 1.36Ång From C38 1.62 eÅ-3

PLAT971_ALERT_2_C Check Calcd Resid. Dens. 1.19Ang From Br3B 1.55 eA-3
 PLAT977_ALERT_2_C Check Negative Difference Density on H75 -0.33 eA-3
 PLAT977_ALERT_2_C Check Negative Difference Density on H77D -0.42 eA-3

Alert level G

PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite 10 Note
 PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ... 8 Report
 PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large 28.81 Why ?
 PLAT171_ALERT_4_G The CIF-Embedded .res File Contains EADP Records 3 Report
 PLAT172_ALERT_4_G The CIF-Embedded .res File Contains DFIX Records 6 Report
 PLAT173_ALERT_4_G The CIF-Embedded .res File Contains DANG Records 3 Report
 PLAT176_ALERT_4_G The CIF-Embedded .res File Contains SADI Records 19 Report
 PLAT178_ALERT_4_G The CIF-Embedded .res File Contains SIMU Records 1 Report
 PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records 3 Report
 PLAT187_ALERT_4_G The CIF-Embedded .res File Contains RIGU Records 2 Report
 PLAT191_ALERT_3_G A Non-default SADI Restraint Value has been used 0.0400 Report
 PLAT191_ALERT_3_G A Non-default SADI Restraint Value has been used 0.0400 Report
 PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) Br1 --Cu1 7.0 s.u.

And 5 other PLAT232 Alerts

More ...

PLAT300_ALERT_4_G Atom Site Occupancy of O1A Constrained at 0.6 Check

And 32 other PLAT300 Alerts

More ...

PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 2) 100% Note

And 4 other PLAT302 Alerts

More ...

PLAT304_ALERT_4_G Non-Integer Number of Atoms in (Resd 4) 0.50 Check

And 2 other PLAT304 Alerts

More ...

PLAT398_ALERT_2_G Deviating C-O-C Angle From 120 for O1A 107.0 Degree

PLAT398_ALERT_2_G Deviating C-O-C Angle From 120 for O1B 104.0 Degree

PLAT413_ALERT_2_G Short Inter XH3 .. XHn H13A ..H79F 2.09 Ang.

x,y,z = 1_555 Check

PLAT413_ALERT_2_G Short Inter XH3 .. XHn H59 ..H79E 1.99 Ang.

1+x,y,z = 1_655 Check

PLAT432_ALERT_2_G Short Inter X...Y Contact Br3B ..C24 3.33 Ang.

1/2-x,1/2+y,z = 8_665 Check

PLAT432_ALERT_2_G Short Inter X...Y Contact Br3B ..C65 3.33 Ang.

x,y,z = 1_555 Check

PLAT773_ALERT_2_G Check long C-C Bond in CIF: C78B --C79B 1.74 Ang.

PLAT860_ALERT_3_G Number of Least-Squares Restraints 114 Note

PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min). 1 Note

0 0 2,

PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600 144 Note

PLAT933_ALERT_2_G Number of HKL-OMIT Records in Embedded .res File 5 Note

0 0 8, 0 2 6, 1 2 3, 1 3 4, 2 1 0,

PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value 3.26 Note

Predicted wR2: Based on SigI**2 4.18 or SHELX Weight 13.21

PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density. 1 Info

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

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

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

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

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

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

8 ALERT type 3 Indicator that the structure quality may be low

49 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

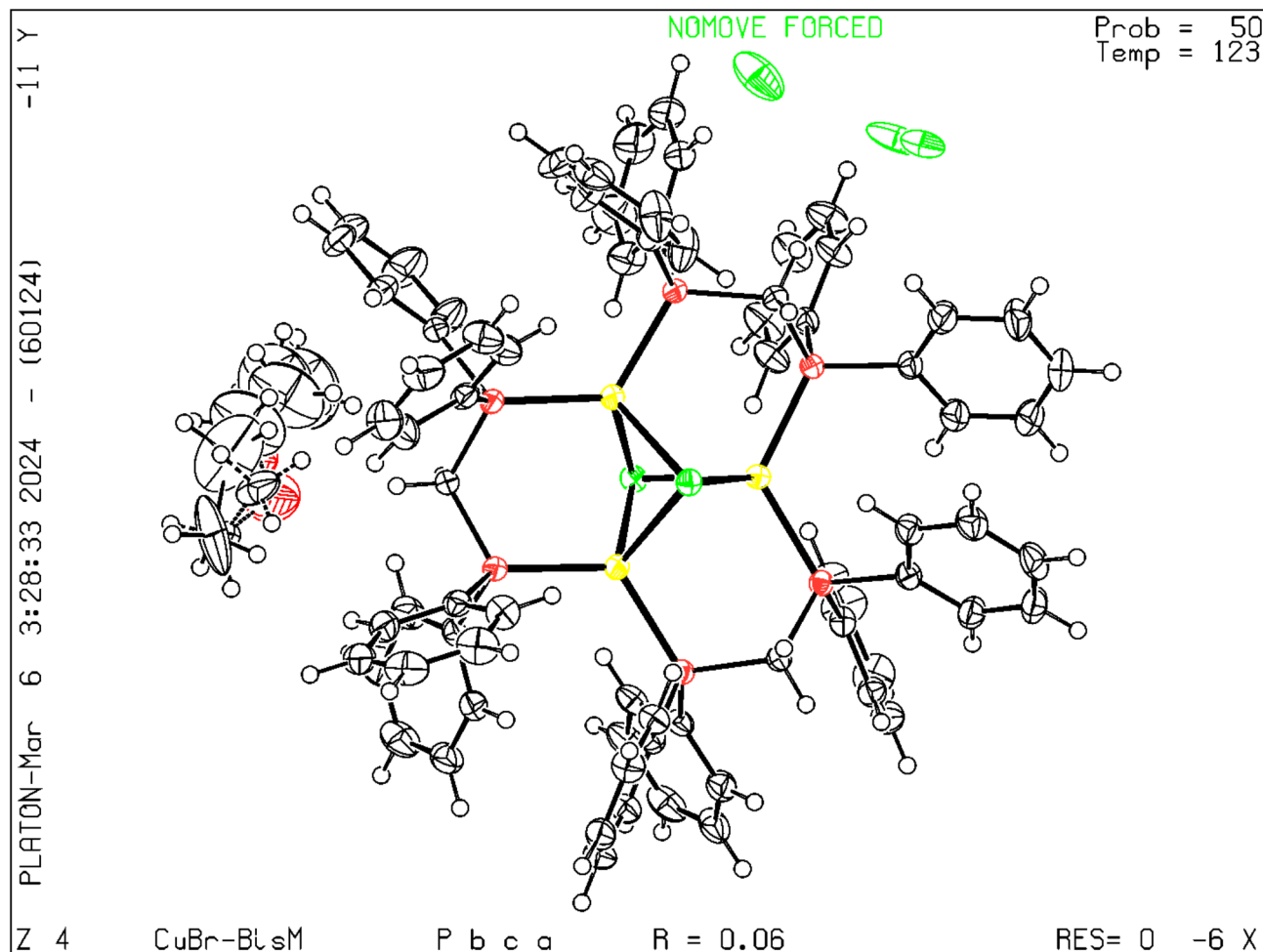
A basic structural check has been run on your CIF. These basic checks will be run on all CIFs submitted for publication in IUCr journals (*Acta Crystallographica*, *Journal of Applied Crystallography*, *Journal of Synchrotron Radiation*); however, if you intend to submit to *Acta Crystallographica Section 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 06/01/2024; check.def file version of 05/01/2024

Datablock CuBr-BisM - ellipsoid plot



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