checkCIF/PLATON report

Structure factors have been supplied for datablock(s) bilm001

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.

Datablock: bilm001

Bond precision:	C-C = 0.0022 A	Wavelength=1.54178		
Cell:	a=6.9787(4) alpha=90		c=16.1330(11) gamma=90	
Temperature:	120 K			
	Calculated	Report	ed	
Volume	1406.86(15)	1406.8	1406.86(15)	
Space group	P 21 21 21	P 21 2	P 21 21 21	
Hall group	P 2ac 2ab	P 2ac	P 2ac 2ab	
Moiety formula	C18 H19 N O	C18 H1	.9 N O	
Sum formula	C18 H19 N O	С18 Н1	.9 N O	
Mr	265.34	265.34	<u> </u>	
Dx,g cm-3	1.253	1.253		
Z	4	4		
Mu (mm-1)	0.599	0.599		
F000	568.0	568.0		
F000′	569.54			
h,k,lmax	8,15,20	8,15,2	20	
Nref	2909[1692]	2889		
Tmin,Tmax	0.944,0.965	0.701,	0.754	
Tmin'	0.880			
Correction method= # Reported T Limits: Tmin=0.701 Tmax=0.754 AbsCorr = MULTI-SCAN				
Data completeness= 1.71/0.99 Theta(max)= 75.265				
R(reflections) = 0.0288(2770) wR2(reflections) = 0.0738(2889)				
S = 1.067 Npar= 257				

Click on the hyperlinks for more details of the test.

Alert level C		
PLAT089_ALERT_3_C Poor Data / Parameter Ratio (Zi	max < 18)	6.56 Note
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin	& STh/L= 0.600	2 Report
Alert level G PLAT791 ALERT 4 G Model has Chirality at C2	(Sohnke SpGr)	R Verify

Author Response: On close inspection of the connectivity and application of CIP rules, C2=S, C3=R, C13=R.

PLAT791_ALERT_4_G Model has Chirality at C3 (Sohnke SpGr) R Verify

Author Response: On close inspection of the connectivity and application of CIP rules, C2=S, C3=R, C13=R.

PLAT791_ALERT_4_G Model has Chirality at C13 (Sohnke SpGr) R Verify

Author Response: On close inspection of the connectivity and application of CIP rules, C2=S, C3=R, C13=R.

PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600	5 Note
PLAT913_ALERT_3_G Missing # of Very Strong Reflections in FCF	1 Note
PLAT933_ALERT_2_G Number of OMIT Records in Embedded .res File	3 Note
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.	9 Info

- 0 ALERT level ${\bf A}$ = Most likely a serious problem resolve or explain
- 0 ALERT level B = A potentially serious problem, consider carefully
- 2 ALERT level C = Check. Ensure it is not caused by an omission or oversight
- 7 ALERT level G = General information/check it is not something unexpected
- O ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 2 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
- 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.

PLATON version of 22/03/2021; check.def file version of 19/03/2021

