

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) 4

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: 4

Bond precision:	C-C = 0.0020 Å	Wavelength=0.71075		
Cell:	a=7.7844 (7)	b=6.4742 (6)	c=15.1151 (14)	
	alpha=90	beta=90	gamma=90	
Temperature:	173 K			

	Calculated	Reported
Volume	761.77 (12)	761.77 (12)
Space group	P n m a	P n m a
Hall group	-P 2ac 2n	-P 2ac 2n
Moiety formula	C8 H8 O4	C8 H8 O4
Sum formula	C8 H8 O4	C8 H8 O4
Mr	168.14	168.15
Dx, g cm ⁻³	1.466	1.466
Z	4	4
Mu (mm ⁻¹)	0.119	0.119
F000	352.0	352.0
F000'	352.24	
h, k, l _{max}	9, 7, 18	9, 7, 18
Nref	765	763
Tmin, Tmax	0.993, 0.994	0.862, 0.994
Tmin'	0.988	

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Correction method= # Reported T Limits: Tmin=0.862 Tmax=0.994
AbsCorr = MULTI-SCAN
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Data completeness= 0.997 Theta (max)= 25.355

R(reflections)= 0.0313(704)	wR2(reflections)= 0.0904(763)
S = 1.129	Npar= 74

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

PLAT250_ALERT_2_C	Large U3/U1 Ratio for <U(i,j)> Tensor(Resd	1)	2.1	Note
PLAT911_ALERT_3_C	Missing FCF Refl Between Thmin & STh/L=	0.600	2	Report
	0 2 0, 2 0 0,			



Alert level G

PLAT299_ALERT_4_G	Atom Site Occupancy Constrained at		0.5	Check
	H8A H8B H9A H9B H9C			
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...		11.00	Deg.
	H9B -C9 -H9A 1_555 1_555 7_575	#	35	Check
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...		11.00	Deg.
	H9A -C9 -H9B 1_555 1_555 7_575	#	38	Check
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...		11.00	Deg.
	H9C -C9 -H9C 1_555 1_555 7_575	#	45	Check
PLAT913_ALERT_3_G	Missing # of Very Strong Reflections in FCF		1	Note
	0 2 0,			
PLAT933_ALERT_2_G	Number of HKL-OMIT Records in Embedded .res File		1	Note
	0 2 0,			
PLAT969_ALERT_5_G	The 'Henn et al.' R-Factor-gap value		7.481	Note
	Predicted wR2: Based on SigI**2 1.21 or SHELX Weight	8.01		
PLAT978_ALERT_2_G	Number C-C Bonds with Positive Residual Density.		4	Info

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

0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
3 ALERT type 2 Indicator that the structure model may be wrong or deficient
2 ALERT type 3 Indicator that the structure quality may be low
4 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.

Datablock 4 - ellipsoid plot

