

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) Eu4Li7Bi6

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: Eu4Li7Bi6

Bond precision:	Bi-Eu = 0.0010 Å		Wavelength=0.71073
Cell:	a=17.558(3)	b=4.8114(8)	c=12.812(2)
	alpha=90	beta=126.035(2)	gamma=90
Temperature:	200 K		
	Calculated	Reported	
Volume	875.2(3)	875.2(3)	
Space group	C 2/m	C2/m	
Hall group	-C 2y	?	
Moiety formula	2(Bi3 Eu2), 7(Li)	Eu4Li7Bi6	
Sum formula	Bi6 Eu4 Li7	Bi6 Eu4 Li7	
Mr	1910.34	1910.30	
Dx,g cm-3	7.249	7.249	
Z	2	2	
Mu (mm-1)	74.135	74.133	
F000	1542.0	1542.0	
F000'	1498.46		
h,k,lmax	22,6,16	22,6,16	
Nref	1091	1091	
Tmin,Tmax	0.072,0.108	0.151,0.231	
Tmin'	0.037		

Correction method= MULTI-SCAN

Data completeness= 1.000 Theta(max)= 27.100

R(reflections)= 0.0247(935) wR2(reflections)= 0.0494(1091)

S = 1.063 Npar= Npar = 42

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 G

PLAT004_ALERT_5_G	Polymeric Structure Found with Dimension	3	Info
PLAT005_ALERT_5_G	No _iucr_refine_instructions_details in the CIF		Please Do !
PLAT042_ALERT_1_G	Calc. and Reported MoietyFormula Strings Differ		Please Check
PLAT128_ALERT_4_G	Alternate Setting for Input Space-Group C2/m	I2/m	Note

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

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

