

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) LaNi_a

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: LaNi_a

Bond precision:	La-Ni = 0.0010 A	Wavelength=0.71073		
Cell:	a=3.9213(5)	b=10.7970(13)	c=4.3833(6)	
	alpha=90	beta=90	gamma=90	
Temperature:	300 K			

	Calculated	Reported
Volume	185.58(4)	185.58(4)
Space group	C m c m	C m c m
Hall group	-C 2c 2	-C 2c 2
Moiety formula	La Ni	?
Sum formula	La Ni	La2 Ni2
Mr	197.60	395.24
Dx, g cm ⁻³	7.072	7.073
Z	4	2
Mu (mm ⁻¹)	32.266	32.266
F000	340.0	340.0
F000'	340.39	
h, k, l _{max}	5, 14, 5	5, 14, 5
Nref	137	138
Tmin, Tmax	0.232, 0.380	0.393, 0.746
Tmin'	0.069	

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Correction method= # Reported T Limits: Tmin=0.393 Tmax=0.746
AbsCorr = MULTI-SCAN
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Data completeness= 1.007 Theta (max)= 27.483

R(reflections)= 0.0248(130)	wR2(reflections)= 0.0612(138)
S = 1.280	Npar= 9

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

CRYSC01_ALERT_1_C The word below has not been recognised as a standard identifier.

gray

CRYSC01_ALERT_1_C No recognised colour has been given for crystal colour.

PLAT971_ALERT_2_C Check Calcd Resid. Dens. 1.15Ång From Nil 1.64 eA-3



Alert level G

PLAT004_ALERT_5_G	Polymeric Structure Found with Maximum Dimension	3	Info
PLAT045_ALERT_1_G	Calculated and Reported Z Differ by a Factor ...	2	Check
PLAT883_ALERT_1_G	No Info/Value for _atom_sites_solution_primary .		Please Do !
PLAT961_ALERT_5_G	Dataset Contains no Negative Intensities		Please Check
PLAT969_ALERT_5_G	The 'Henn et al.' R-Factor-gap value	3.348	Note
Predicted wR2: Based on SigI**2 1.83 or SHELX Weight		4.78	

- 0 **ALERT level A** = Most likely a serious problem - resolve or explain
0 **ALERT level B** = A potentially serious problem, consider carefully
3 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
5 **ALERT level G** = General information/check it is not something unexpected
- 4 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
1 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
0 ALERT type 4 Improvement, methodology, query or suggestion
3 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 LaNi_a - ellipsoid plot

