

# checkCIF/PLATON report

You have not supplied any structure factors. As a result the full set of tests cannot be run.

No syntax errors found.      CIF dictionary      Interpreting this report

## Datablock: lr

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Bond precision:	C-C = 0.0120 A	Wavelength=0.71073	
Cell:	a=22.275(5)	b=9.1138(18)	c=22.091(4)
	alpha=90	beta=105.39(3)	gamma=90
Temperature:	293 K		
	Calculated	Reported	
Volume	4323.9(16)	4323.9(15)	
Space group	C 2/c	C 2/c	
Hall group	-C 2yc	-C 2yc	
Moiety formula	C21 H15 Cd N2 O6, 2(H2 O)	C21 H15 Cd N2 O6, 2(H2 O)	
Sum formula	C21 H19 Cd N2 O8	C21 H19 Cd N2 O8	
Mr	539.79	539.78	
Dx,g cm-3	1.658	1.658	
Z	8	8	
Mu (mm-1)	1.061	1.061	
F000	2168.0	2168.0	
F000'	2162.62		
h,k,lmax	26,10,26	26,10,26	
Nref	3808	3806	
Tmin,Tmax	0.809,0.844	0.816,0.849	
Tmin'	0.809		

Correction method= MULTI-SCAN

Data completeness= 0.999      Theta(max)= 25.000

R(reflections)= 0.0779( 3388)      wR2(reflections)= 0.1669( 3806)

S = 1.186      Npar= 247

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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.

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### Alert level C

PLAT334_ALERT_2_C	Small Average Benzene C-C Dist. C9	-C11	1.37 Ang.
PLAT342_ALERT_3_C	Low Bond Precision on C-C Bonds .....		0.0120 Ang
PLAT601_ALERT_2_C	Structure Contains Solvent Accessible VOIDS of .		32 A**3



## Alert level G

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PLAT004_ALERT_5_G	Info: Polymeric Structure Found with Dimension .	1
PLAT005_ALERT_5_G	No _iucr_refine_instructions_details in CIF ....	?
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large.	55.25
PLAT199_ALERT_1_G	Check the Reported _cell_measurement_temperature	293 K
PLAT200_ALERT_1_G	Check the Reported _diffrn_ambient_temperature	293 K
PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X) Cd1 -- O1 ..	6.0 su
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels .....	6
PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd) .	1.11 Ratio

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

2 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
4 ALERT type 2 Indicator that the structure model may be wrong or deficient  
1 ALERT type 3 Indicator that the structure quality may be low  
2 ALERT type 4 Improvement, methodology, query or suggestion  
2 ALERT type 5 Informative message, check

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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.

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