

# 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: compound\_5

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Bond precision:    C-C = 0.0105 A                      Wavelength=0.71073

Cell:                      a=7.331(5)                      b=21.735(5)                      c=7.213(5)  
                                    alpha=90                      beta=90                      gamma=90

Temperature:                      293 K

	Calculated	Reported
Volume	1149.3(11)	1149.3(11)
Space group	P m n n	Pmnn
Hall group	-P 2n 2	?
Moiety formula	C9 H10 N2 O5 Zn	?
Sum formula	C9 H10 N2 O5 Zn	C9 H10 N2 O5 Zn
Mr	291.58	291.56
Dx,g cm <sup>-3</sup>	1.685	1.685
Z	4	4
Mu (mm <sup>-1</sup> )	2.148	2.148
F000	592.0	592.0
F000'	593.40	
h,k,lmax	9,28,9	9,28,9
Nref	1422	1407
Tmin,Tmax	0.440,0.424	
Tmin'	0.407	

Correction method= Not given

Data completeness= 0.989                      Theta(max)= 27.490

R(reflections)= 0.0718( 879)                      wR2(reflections)= 0.1113( 1407)

S = 1.102                                      Npar= 99

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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 B

PLAT213_ALERT_2_B Atom N2	has ADP max/min Ratio .....	5.0 prola
PLAT220_ALERT_2_B Large Non-Solvent	N      Ueq(max)/Ueq(min) ...	4.5 Ratio

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● **Alert level C**

PLAT213_ALERT_2_C	Atom C6	has ADP max/min Ratio	.....	3.5	prola
PLAT220_ALERT_2_C	Large Non-Solvent	C	Ueq(max)/Ueq(min)	...	3.5 Ratio
PLAT234_ALERT_4_C	Large Hirshfeld Difference	N1	-- C4B	..	0.16 Ang.
PLAT242_ALERT_2_C	Check Low	Ueq as Compared to Neighbors for			N1
PLAT242_ALERT_2_C	Check Low	Ueq as Compared to Neighbors for			C6
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor	....			3.2
PLAT341_ALERT_3_C	Low Bond Precision on	C-C Bonds	.....		0.0105 Ang
PLAT790_ALERT_4_C	Centre of Gravity not Within Unit Cell: Resd.	#			1
	C9 H10 N2 O5 Zn				

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● **Alert level G**

PLAT002_ALERT_2_G	Number of Distance or Angle Restraints on AtSite				2
PLAT004_ALERT_5_G	Info: Polymeric Structure Found with Dimension				3
PLAT005_ALERT_5_G	No _iucr_refine_instructions_details in CIF	....			?
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large.				5.83
PLAT153_ALERT_1_G	The su's on the Cell Axes	are Equal	.....		0.00500 Ang.
PLAT194_ALERT_1_G	Missing _cell_measurement_reflms_used datum	....			?
PLAT195_ALERT_1_G	Missing _cell_measurement_theta_max datum	....			?
PLAT196_ALERT_1_G	Missing _cell_measurement_theta_min datum	....			?
PLAT199_ALERT_1_G	Check the Reported _cell_measurement_temperature				293 K
PLAT200_ALERT_1_G	Check the Reported _diffrn_ambient_temperature				293 K
PLAT301_ALERT_3_G	Note: Main Residue Disorder	.....			23 Perc.
PLAT432_ALERT_2_G	Short Inter X...Y Contact	C7A	.. C7A	..	2.19 Ang.
PLAT432_ALERT_2_G	Short Inter X...Y Contact	C7A	.. C8A	..	2.68 Ang.
PLAT720_ALERT_4_G	Number of Unusual/Non-Standard Labels	.....			1
PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd)				1.14 Ratio
PLAT793_ALERT_4_G	The Model has Chirality at C2	(Verify)	....		S
PLAT811_ALERT_5_G	No ADDSYM Analysis: Too Many Excluded Atoms	....			!
PLAT860_ALERT_3_G	Note: Number of Least-Squares Restraints	.....			1

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

6 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
11 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  
5 ALERT type 4 Improvement, methodology, query or suggestion  
3 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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**PLATON version of 15/02/2012; check.def file version of 10/02/2012**

