

# 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: rg24c\_0m

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Bond precision:	C-C = 0.0101 A	Wavelength=0.71073	
Cell:	a=10.4872(3)	b=10.4872(3)	c=26.5498(8)
	alpha=90	beta=90	gamma=120
Temperature:	100 K		
	Calculated	Reported	
Volume	2528.78(19)	2528.78(13)	
Space group	P 31	P 31	
Hall group	P 31	P 31	
Moiety formula	C30 H24 N6 Zn, 2(F6 Ta)	C30 H24 N6 Zn, 2(F6 Ta)	
Sum formula	C30 H24 F12 N6 Ta2 Zn	C30 H24 F12 N6 Ta2 Zn	
Mr	1123.84	1123.82	
Dx,g cm-3	2.214	2.214	
Z	3	3	
Mu (mm-1)	7.279	7.279	
F000	1590.0	1590.0	
F000'	1587.73		
h,k,lmax	15,15,38	15,15,37	
Nref	5238[ 10476]	10035	
Tmin,Tmax	0.485,0.665	0.600,0.746	
Tmin'	0.209		

Correction method= MULTI-SCAN

Data completeness= 1.92/0.96      Theta(max)= 30.750

R(reflections)= 0.0338( 9034)      wR2(reflections)= 0.0479( 10035)

S = 1.024      Npar= 461

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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

PLAT244_ALERT_4_C Low	'Solvent' Ueq as Compared to Neighbors of	Ta2
PLAT342_ALERT_3_C Low	Bond Precision on C-C Bonds .....	0.0101 Ang

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## ● Alert level G

REFLT03\_ALERT\_4\_G Please check that the estimate of the number of Friedel pairs is correct. If it is not, please give the correct count in the \_publ\_section\_exptl\_refinement section of the submitted CIF.

From the CIF: \_diffrn\_reflns\_theta\_max 30.75

From the CIF: \_reflns\_number\_total 10035

Count of symmetry unique reflns 5238

Completeness (\_total/calc) 191.58%

TEST3: Check Friedels for noncentro structure

Estimate of Friedel pairs measured 4797

Fraction of Friedel pairs measured 0.916

Are heavy atom types Z>Si present yes

PLAT005\_ALERT\_5\_G No \_iucr\_refine\_instructions\_details in CIF .... ?

PLAT152\_ALERT\_1\_G The Supplied and Calc. Volume s.u. Differ by ... 6 Units

PLAT432\_ALERT\_2\_G Short Inter X...Y Contact F12 .. C5 .. 2.86 Ang.

PLAT790\_ALERT\_4\_G Centre of Gravity not Within Unit Cell: Resd. # 2

F6 Ta

PLAT790\_ALERT\_4\_G Centre of Gravity not Within Unit Cell: Resd. # 3

F6 Ta

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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  
2 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
6 **ALERT level G** = General information/check it is not something unexpected

- 1 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  
1 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
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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.

