checkCIF/PLATON report

Structure factors have been supplied for datablock(s) sjsu10b_hex

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: sjsu10b_hex

Bond precision:	C-C = 0.0162 A	Wavelength=0.71073			
Cell:	a=14.0975(8) alpha=90	b=14.0975(8) beta=90	c=26.2314(17) gamma=120		
Temperature:	100 K		-		
	Calculated	Reporte	d		
Volume	4514.8(6)	4514.8(6)		
Space group	P 31 2 1	P 31 2 1			
Hall group	P 31 2"	P 31 2"			
Moiety formula	C30 H30 N12 O2 Zn	2(C15 H15 N6 O Zn0.5)			
Sum formula	C30 H30 N12 O2 Zn	C30 H30 N12 O2 Zn			
Mr	656.05	656.03			
Dx,g cm-3	1.448	1.448			
Z	6	6			
Mu (mm-1)	0.867	0.867			
F000	2040.0	2040.0			
F000′	2042.25				
h,k,lmax	17,17,32	17,17,3	2		
Nref	6253[3512]	6192			
Tmin,Tmax					
Tmin'					
Correction metho	od= Not given				
Data completenes	ss= 1.76/0.99	Theta(max) = 26 .	479		
R(reflections)=	0.0636(5312)		wR2(reflections)=		
S = 1.049	Npar= 44	1	0.10/0(0192)		

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.

[IMAGE] Alert level A

EXPT005_ALERT_1_A _exptl_crystal_description is missing Crystal habit description. The following tests will not be performed. CRYSR_01 PLAT058_ALERT_1_A Maximum Transmission Factor Missing? PLAT059_ALERT_1_A Minimum Transmission Factor Missing? PLAT699_ALERT_1_A Missing _exptl_crystal_description Value Please Do !

[IMAGE] Alert level B

PLAT234_ALERT_4_B	Large Hirshfeld Differ	ence C28A	C29A .	. 0.30	Ang.
PLAT341_ALERT_3_B	Low Bond Precision on	C-C Bonds		. 0.01621	Ang.

[IMAGE] Alert level C

ABSTY02_ALERT_1_C An _exptl_absorpt_correction_type has been given without a literature citation. This should be contained in the _exptl_absorpt_process_details field. Absorption correction given as multi-scan RINTA01_ALERT_3_C The value of Rint is greater than 0.12 Rint given 0.145 PLAT053_ALERT_1_C Minimum Crystal Dimension Missing (or Error) ... Please Check PLAT054_ALERT_1_C Medium Crystal Dimension Missing (or Error) ... Please Check PLAT055_ALERT_1_C Maximum Crystal Dimension Missing (or Error) ... Please Check PLAT090_ALERT_3_C Poor Data / Parameter Ratio (Zmax > 18) 7.90 Note PLAT213_ALERT_2_C Atom C30A has ADP max/min Ratio 3.2 prolat PLAT220_ALERT_2_C NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range 3.9 Ratio PLAT222_ALERT_3_C NonSolvent Resd 1 H Uiso(max)/Uiso(min) Range 4.8 Ratio PLAT230_ALERT_2_C Hirshfeld Test Diff for 7.0 s.u. C6A --C7A . PLAT234_ALERT_4_C Large Hirshfeld Difference N9A --C16A 0.17 Ang. . PLAT234_ALERT_4_C Large Hirshfeld Difference C28A --C29B 0.22 Ang. . PLAT234_ALERT_4_C Large Hirshfeld Difference C28A --C30B 0.24 Ang. • PLAT234_ALERT_4_C Large Hirshfeld Difference C9A --C10A 0.18 Ang. • PLAT234_ALERT_4_C Large Hirshfeld Difference C11A --C12A 0.18 Ang. . PLAT234_ALERT_4_C Large Hirshfeld Difference C13A --C14A 0.18 Ang. . PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of N4A Check PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of (MainMol' Ueq as Compared to Neighbors of Compared U(i,i) Tensor C28A Check C13A Check PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor 2.2 Note PLAT309_ALERT_2_C Single Bonded Oxygen (C-O > 1.3 Ang) 02A Check PLAT309_ALERT_2_C Single Bonded Oxygen (C-O > 1.3 Ang) 02B Check PLAT906_ALERT_3_C Large K Value in the Analysis of Variance 2.105 Check

[IMAGE] Alert level G

ABSMU01_ALERT_1_G Calculation of _exptl_absorpt_correction_mu not performed for this radiation type. PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ... 2 Report PLAT020_ALERT_3_G The Value of Rint is Greater Than 0.12 0.145 Report PLAT042_ALERT_1_G Calc. and Reported Moiety Formula Strings Differ Please Check PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large 6.75 Why ? PLAT168_ALERT_4_G The CIF-Embedded .res File Contains EXYZ Records 6 Report PLAT171_ALERT_4_G The CIF-Embedded .res File Contains EADP Records 6 Report PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records 1 Report PLAT230_ALERT_2_G Hirshfeld Test Diff for 02A --C16A . 5.2 s.u. PLAT301_ALERT_3_G Main Residue Disorder(Resd 1) 40% Note PLAT413_ALERT_2_G Short Inter XH3 .. XHn H10A ..H30B . 2.03 Ang. x-y,1-y,5/3-z = 4_566 Check (II) PLAT794_ALERT_5_G Tentative Bond Valency for Zn2 2.06 Info PLAT860_ALERT_3_G Number of Least-Squares Restraints 12 Note PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary . Please Do ! PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min). 1 Note PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600 27 Note PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density. 0 Info

4 ALERT level A = Most likely a serious problem - resolve or explain 2 ALERT level B = A potentially serious problem, consider carefully 23 ALERT level C = Check. Ensure it is not caused by an omission or oversight 17 ALERT level G = General information/check it is not something unexpected 11 ALERT type 1 CIF construction/syntax error, inconsistent or missing data 14 ALERT type 2 Indicator that the structure model may be wrong or deficient 9 ALERT type 3 Indicator that the structure quality may be low 11 ALERT type 4 Improvement, methodology, query or suggestion 1 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.

Validation response form

Please find below a validation response form (VRF) that can be filled in and pasted into your CIF.

```
# start Validation Reply Form
vrf EXPT005 sjsu10b hex
PROBLEM: _exptl_crystal_description is missing
RESPONSE: ...
_vrf_PLAT058_sjsu10b_hex
PROBLEM: Maximum Transmission Factor Missing .....
                                                                 ?
RESPONSE: ...
_vrf_PLAT059_sjsu10b_hex
PROBLEM: Minimum Transmission Factor Missing .....
                                                                 ?
RESPONSE: ...
_vrf_PLAT699_sjsu10b_hex
PROBLEM: Missing _exptl_crystal_description Value ..... Please Do !
RESPONSE: ...
# end Validation Reply Form
```



PLATON version of 20/01/2022; check.def file version of 19/01/2022

Datablock sjsu10b_hex - ellipsoid plot