

## checkCIF/PLATON report

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

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: 2\_18srv491

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Bond precision: C-C = 0.0163 Å Wavelength=0.71073

Cell: a=11.853(2) b=17.680(3) c=23.961(4)  
alpha=76.709(5) beta=76.366(5) gamma=89.443(6)

Temperature: 120 K

	Calculated	Reported
Volume	4743.8(14)	4743.8(14)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	2(C47 H31), 2(C16 Sb), 3(C H Cl3)	C16 Sb, 1.5(C H Cl3), C47 H31
Sum formula	C97 H65 Cl21 Sb2	C48.50 H32.50 Cl10.50 Sb
Mr	2218.46	1109.22
Dx, g cm-3	1.553	1.553
Z	2	4
Mu (mm-1)	1.207	1.207
F000	2212.0	2212.0
F000'	2216.42	
h, k, lmax	15,22,30	15,22,30
Nref	20727	20630
Tmin, Tmax	0.729,0.976	0.567,0.746
Tmin'	0.715	

Correction method= # Reported T Limits: Tmin=0.567 Tmax=0.746  
AbsCorr = MULTI-SCAN

Data completeness= 0.995 Theta (max)= 27.000

R(reflections)= 0.0890( 16317) wR2 (reflections)=  
S = 1.060 Npar= 1082 0.2664( 20630)

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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**

PLAT084_ALERT_3_C	High wr2 Value (i.e. > 0.25) .....	0.27	Report
PLAT220_ALERT_2_C	NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range	3.4	Ratio
PLAT244_ALERT_4_C	Low 'Solvent' Ueq as Compared to Neighbors of	C1S	Check
PLAT244_ALERT_4_C	Low 'Solvent' Ueq as Compared to Neighbors of	C2S	Check
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor ....	2.1	Note
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor ....	2.1	Note
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor ....	2.5	Note
PLAT250_ALERT_2_C	Large U3/U1 Ratio for Average U(i,j) Tensor ....	2.3	Note
PLAT342_ALERT_3_C	Low Bond Precision on C-C Bonds .....	0.01634	Ang.
PLAT601_ALERT_2_C	Unit Cell Contains Solvent Accessible VOIDS of .	60	Ang**3

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### **Alert level G**

PLAT003_ALERT_2_G	Number of Uiso or Uij Restrained non-H Atoms ...	1	Report
PLAT012_ALERT_1_G	No _shelx_res_checksum Found in CIF .....	Please	Check
PLAT042_ALERT_1_G	Calc. and Reported Moiety Formula Strings Differ	Please	Check
PLAT045_ALERT_1_G	Calculated and Reported Z Differ by a Factor ...	0.5000	Check
PLAT072_ALERT_2_G	SHELXL First Parameter in WGHT Unusually Large	0.15	Report
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large	41.00	Why ?
PLAT186_ALERT_4_G	The CIF-Embedded .res File Contains ISOR Records	1	Report
PLAT434_ALERT_2_G	Short Inter HL..HL Contact C13A ..C17S	3.29	Ang.
	x,y,z = 1_555		Check
PLAT794_ALERT_5_G	Tentative Bond Valency for Sb1 (V) .	5.05	Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Sb2 (V) .	5.04	Info
PLAT860_ALERT_3_G	Number of Least-Squares Restraints .....	6	Note
PLAT870_ALERT_4_G	ALERTS Related to Twinning Effects Suppressed ..	!	Info
PLAT933_ALERT_2_G	Number of HKL-OMIT Records in Embedded .res File	4	Note
PLAT967_ALERT_5_G	Note: Two-Theta Cutoff Value in Embedded .res ..	54.0	Degree

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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

10 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight

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

3 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

4 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* 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.

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**PLATON version of 18/12/2021; check.def file version of 18/12/2021**

Datablock 2\_18srv491 - ellipsoid plot

