

# 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: SGGF3

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Bond precision:    C-C = 0.0113 A

Wavelength=0.71073

Cell:                a=16.3096(16)        b=18.8186(18)        c=19.9272(18)  
                      alpha=85.532(3)     beta=71.947(3)       gamma=89.111(3)  
Temperature:        150 K

	Calculated	Reported
Volume	5797.1(10)	5797.1(10)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C24 H30 B4 Mo O4 W2	C24 H30 B4 Mo O4 W2
Sum formula	C24 H30 B4 Mo O4 W2	C24 H30 B4 Mo O4 W2
Mr	889.34	889.36
Dx,g cm-3	2.038	2.038
Z	8	8
Mu (mm-1)	8.370	8.370
F000	3328.0	3328.0
F000'	3302.65	
h,k,lmax	21,24,25	21,24,25
Nref	26583	26525
Tmin,Tmax	0.168,0.433	0.246,0.433
Tmin'	0.127	

Correction method= # Reported T Limits: Tmin=0.246 Tmax=0.433  
AbsCorr = MULTI-SCAN

Data completeness= 0.998

Theta(max)= 27.484

R(reflections)= 0.0349( 22650)

wR2(reflections)= 0.0880( 26525)

S = 1.065

Npar= 1295

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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**

PLAT213_ALERT_2_C	Atom O22	has ADP max/min Ratio	.....	3.2	prolat
PLAT213_ALERT_2_C	Atom C16	has ADP max/min Ratio	.....	3.2	prolat
PLAT213_ALERT_2_C	Atom C17	has ADP max/min Ratio	.....	3.4	prolat
PLAT213_ALERT_2_C	Atom C18	has ADP max/min Ratio	.....	3.1	prolat
PLAT213_ALERT_2_C	Atom C22	has ADP max/min Ratio	.....	3.2	prolat
PLAT213_ALERT_2_C	Atom C38	has ADP max/min Ratio	.....	3.1	prolat
PLAT213_ALERT_2_C	Atom O82	has ADP max/min Ratio	.....	3.8	prolat
PLAT213_ALERT_2_C	Atom C70	has ADP max/min Ratio	.....	3.7	prolat
PLAT213_ALERT_2_C	Atom C99	has ADP max/min Ratio	.....	3.1	prolat
PLAT213_ALERT_2_C	Atom C100	has ADP max/min Ratio	.....	3.2	prolat
PLAT220_ALERT_2_C	Non-Solvent Resd 1	C	Ueq(max)/Ueq(min) Range	3.8	Ratio
PLAT220_ALERT_2_C	Non-Solvent Resd 3	C	Ueq(max)/Ueq(min) Range	3.7	Ratio
PLAT220_ALERT_2_C	Non-Solvent Resd 4	C	Ueq(max)/Ueq(min) Range	3.7	Ratio
PLAT241_ALERT_2_C	High	'MainMol' Ueq as Compared to Neighbors of		C22	Check
PLAT242_ALERT_2_C	Low	'MainMol' Ueq as Compared to Neighbors of		Mol	Check
PLAT342_ALERT_3_C	Low Bond Precision on	C-C Bonds .....		0.01131	Ang.
PLAT790_ALERT_4_C	Centre of Gravity not Within Unit Cell: Resd. #				1 Note
	C24 H30 B4 Mo O4 W2				

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● **Alert level G**

PLAT005_ALERT_5_G	No Embedded Refinement Details Found in the CIF				Please Do !
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT Unusually Large			63.69	Why ?
PLAT154_ALERT_1_G	The s.u.'s on the Cell Angles are Equal ..(Note)			0.003	Degree
PLAT232_ALERT_2_G	Hirshfeld Test Diff (M-X) Mol --C23			5.7	s.u.
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for			C24	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for			C54	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for			C84	Check
PLAT343_ALERT_2_G	Unusual sp? Angle Range in Main Residue for			C111	Check
PLAT380_ALERT_4_G	Incorrectly? Oriented X(sp2)-Methyl Moiety			C47	Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact O82 ..C43			2.94	Ang.
		x,y,z =		1_555	Check
PLAT764_ALERT_4_G	Overcomplete CIF Bond List Detected (Rep/Expd)			1.15	Ratio
PLAT790_ALERT_4_G	Centre of Gravity not Within Unit Cell: Resd. #				4 Note
	C24 H30 B4 Mo O4 W2				

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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  
17 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
12 **ALERT level G** = General information/check it is not something unexpected
- 1 **ALERT type 1** CIF construction/syntax error, inconsistent or missing data  
22 **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* 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 06/01/2019; check.def file version of 19/12/2018**

