

# 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: nzx03

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Bond precision:    C-C = 0.0099 Å

Wavelength=0.71073

Cell:                a=18.5753(9)                b=18.6769(9)                c=20.2553(10)  
                      alpha=83.513(4)            beta=85.582(4)            gamma=62.139(5)  
Temperature:        150 K

	Calculated	Reported
Volume	6170.5(6)	6170.5(6)
Space group	P -1	P -1
Hall group	-P 1	-P 1
Moiety formula	C115 H105 Ag3 P8 Ru, 2(B F4), 5(C4 H8 O)	?
Sum formula	C135 H145 Ag3 B2 F8 O5 P8 Ru	C135 H145 Ag3 B2 F8 O5 P8 Ru
Mr	2693.58	2693.56
Dx, g cm <sup>-3</sup>	1.450	1.450
Z	2	2
Mu (mm <sup>-1</sup> )	0.759	0.759
F000	2764.0	2764.0
F000'	2758.75	
h,k,lmax	24,24,26	24,24,26
Nref	30440	26131
Tmin,Tmax	0.841,0.970	0.823,1.000
Tmin'	0.749	

Correction method= # Reported T Limits: Tmin=0.823 Tmax=1.000  
AbsCorr = MULTI-SCAN

Data completeness= 0.858

Theta(max)= 28.219

R(reflections)= 0.0575( 17265)

wR2(reflections)= 0.1518( 26131)

S = 1.044

Npar= 1497

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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 A

PLAT213\_ALERT\_2\_A Atom C76A has ADP max/min Ratio ..... 12.9 prolat

**Author Response: The atom in question is part of a disordered phenyl ring.**

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### Alert level B

PLAT029\_ALERT\_3\_B \_diffn\_measured\_fraction\_theta\_full Low ..... 0.946 Note  
PLAT364\_ALERT\_2\_B Short C(sp3)-C(sp) Bond C3 - C4 .. 1.23 Ang.

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### Alert level C

PLAT202\_ALERT\_3\_C Isotropic non-H Atoms in Anion/Solvent ..... 5 Check  
PLAT213\_ALERT\_2\_C Atom C72A has ADP max/min Ratio ..... 3.1 prolat

**Author Response: The atom in question is part of a disordered phenyl ring.**

PLAT213\_ALERT\_2\_C Atom C73A has ADP max/min Ratio ..... 4.0 prolat

**Author Response: The atom in question is part of a disordered phenyl ring.**

PLAT220\_ALERT\_2\_C Large Non-Solvent C Ueq(max)/Ueq(min) Range 4.2 Ratio  
PLAT223\_ALERT\_2\_C Large Solvent/Anion H Ueq(max)/Ueq(min) ..... 4.0 Ratio  
PLAT241\_ALERT\_2\_C High 'MainMol' Ueq as Compared to Neighbors of C67 Check  
PLAT243\_ALERT\_4\_C High 'Solvent' Ueq as Compared to Neighbors of C131 Check  
PLAT243\_ALERT\_4\_C High 'Solvent' Ueq as Compared to Neighbors of C133 Check  
PLAT243\_ALERT\_4\_C High 'Solvent' Ueq as Compared to Neighbors of C138 Check  
PLAT243\_ALERT\_4\_C High 'Solvent' Ueq as Compared to Neighbors of O139 Check  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C132 Check  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C141 Check  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C142 Check  
PLAT244\_ALERT\_4\_C Low 'Solvent' Ueq as Compared to Neighbors of C143 Check  
PLAT331\_ALERT\_2\_C Small Average Phenyl C-C Dist. C71B -C76B 1.36 Ang.  
PLAT342\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.00989 Ang.  
PLAT360\_ALERT\_2\_C Short C(sp3)-C(sp3) Bond C140 - C141 .. 1.43 Ang.  
PLAT360\_ALERT\_2\_C Short C(sp3)-C(sp3) Bond C141 - C142 .. 1.43 Ang.  
PLAT373\_ALERT\_2\_C Long C(sp)-C(sp) Bond C2 - C3 .. 1.36 Ang.  
PLAT411\_ALERT\_2\_C Short Inter H...H Contact H13J .. H15C .. 2.09 Ang.  
PLAT411\_ALERT\_2\_C Short Inter H...H Contact H15P .. H61 .. 2.13 Ang.

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### Alert level G

PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 9 Note  
PLAT003\_ALERT\_2\_G Number of Uiso or Uij Restrained non-H Atoms ... 1 Report  
PLAT083\_ALERT\_2\_G SHELXL Second Parameter in WGHT Unusually Large 10.87 Why ?  
PLAT171\_ALERT\_4\_G The CIF-Embedded .res File Contains EADP Records 2 Report  
PLAT172\_ALERT\_4\_G The CIF-Embedded .res File Contains DFIX Records 8 Report  
PLAT244\_ALERT\_4\_G Low 'Solvent' Ueq as Compared to Neighbors of B119 Check  
PLAT244\_ALERT\_4\_G Low 'Solvent' Ueq as Compared to Neighbors of B124 Check  
PLAT301\_ALERT\_3\_G Main Residue Disorder ..... Percentage = 5 Note  
PLAT302\_ALERT\_4\_G Anion/Solvent Disorder ..... Percentage = 14 Note



PLAT304_ALERT_4_G Non-Integer Number of Atoms ( 7.15) in Resd. #	8	Check
PLAT304_ALERT_4_G Non-Integer Number of Atoms ( 5.85) in Resd. #	9	Check
PLAT343_ALERT_2_G Unusual sp3 Angle Range in Main Residue for	C4	Check
PLAT380_ALERT_4_G Incorrectly? Oriented X(sp2)-Methyl Moiety .....	C20	Check
PLAT790_ALERT_4_G Centre of Gravity not Within Unit Cell: Resd. #	8	Note
C4 H8 O		
PLAT790_ALERT_4_G Centre of Gravity not Within Unit Cell: Resd. #	9	Note
C4 H8 O		
PLAT793_ALERT_4_G The Model has Chirality at C4 (Centro SPGR)	R	Verify
PLAT860_ALERT_3_G Number of Least-Squares Restraints .....	11	Note

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1	<b>ALERT level A</b>	= Most likely a serious problem - resolve or explain
2	<b>ALERT level B</b>	= A potentially serious problem, consider carefully
21	<b>ALERT level C</b>	= Check. Ensure it is not caused by an omission or oversight
17	<b>ALERT level G</b>	= General information/check it is not something unexpected
0	ALERT type 1	CIF construction/syntax error, inconsistent or missing data
16	ALERT type 2	Indicator that the structure model may be wrong or deficient
5	ALERT type 3	Indicator that the structure quality may be low
20	ALERT type 4	Improvement, methodology, query or suggestion
0	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 19/11/2015; check.def file version of 17/11/2015**



