# checkCIF/PLATON report

## **Datablock: MRMNEa**

Bond precision: C-C = 0.0104 A Wavelength=1.54184

Cell: a=8.6697(3) b=15.4417(6) c=11.9482(4)

alpha=90 beta=99.700(3) gamma=90

Temperature: 285 K

 Calculated
 Reported

 Volume
 1576.70(10)
 1576.70(10)

 Space group
 P 21
 P 1 21 1

 Hall group
 P 2yb
 P 2yb

Moiety formula C30 H46 Ag Cl O P2 S C30 H46 Ag Cl O P2 S Sum formula C30 H46 Ag Cl O P2 S C30 H46 Ag Cl O P2 S

Mr 660.00 660.03 Dx,g cm-3 1.390 1.390 Z 2 2 Mu (mm-1) 7.636 7.637 F000 688.0 692.3

F000' 692.09 h,k,lmax 10,19,14 10,19,14 Nref 6384[ 3315] 5818

Tmin, Tmax 0.101, 0.444 0.377, 1.994

Tmin' 0.028

Correction method= GAUSSIAN

Data completeness= 1.76/0.91 Theta(max)= 73.940

R(reflections) = 0.0545( 5661) wR2(reflections) = 0.1621( 5818)

S = 1.140 Npar= Npar = 338

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.

### 🖣 Alert level A

PLAT029\_ALERT\_3\_A \_diffrn\_measured\_fraction\_theta\_full Low ...... 0.911 Note PLAT073\_ALERT\_1\_A H-atoms ref, but \_hydrogen\_treatment reported as constr

## Alert level C

PLAT068\_ALERT\_1\_C Reported F000 Differs from Calcd (or Missing)... Please Check

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PLAT090_ALERT_3_C Poor Data / Parameter Ratio (Zmax > 18) ....... 9.81 Note
PLAT220_ALERT_2_C Large Non-Solvent C Ueq(max)/Ueq(min) Range 3.6 Ratio
PLAT342_ALERT_3_C Low Bond Precision on C-C Bonds ...... 0.0104 Ang.
PLAT790_ALERT_4_C Centre of Gravity not Within Unit Cell: Resd. # 1 Note
C30 H46 Ag Cl O P2 S
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## Alert level G

PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF	Please Do !
PLAT072_ALERT_2_G SHELXL First Parameter in WGHT Unusually Large.	0.11 Why ?
PLAT164_ALERT_4_G Nr. of Refined C-H H-Atoms in Heavy-Atom Struct.	46 Note
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels	27 Note
PLAT982_ALERT_1_G The C-f'= 0.019 Deviates from the IT-value	0.018
PLAT982_ALERT_1_G The Ag-f'= 0.176 Deviates from the IT-value	0.131
PLAT982_ALERT_1_G The Cl-f'= 0.368 Deviates from the IT-value	0.364
PLAT982_ALERT_1_G The O-f'= 0.052 Deviates from the IT-value	0.049
PLAT982_ALERT_1_G The P-f'= 0.304 Deviates from the IT-value	0.296
PLAT982_ALERT_1_G The S-f'= 0.335 Deviates from the IT-value	0.333
PLAT983_ALERT_1_G The Ag-f"= 4.271 Deviates from the IT-Value	4.282

- 2 ALERT level A = Most likely a serious problem resolve or explain
- 0 ALERT level B = A potentially serious problem, consider carefully
- 5 ALERT level C = Check. Ensure it is not caused by an omission or oversight
- 11 ALERT level G = General information/check it is not something unexpected
- 9 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 2 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
- 3 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*, 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.

PLATON version of 05/02/2014; check.def file version of 05/02/2014

