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# 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.

# Datablock: I

Bond precision:	Ga-P = 0.0047 A	Wavelength=0.71073			
Cell:	a=7.294(9)	b=18.03(2	c=6.557(8)		
Temperature:	alpha=90 296 K	beta=90	gamma=90		
	Calculated	_	orted		
Volume	862.3(18)		.0(18)		
Space group	I b a 2	Iba2			
Hall group		?			
=	Ag Ga5 P8, 4(Ba)	?			
Sum formula	_	Ag Ba4 Ga5 P8			
Mr	1253.55	1253.59			
Dx,g cm-3	4.828	4.830			
Z	2	2			
Mu (mm-1)	18.472		478		
F000	1092.0	109	2.0		
F000′	1091.89				
h,k,lmax	9,23,8	9,2	3,8		
Nref	1002[ 549]	966			
Tmin,Tmax	0.343,0.574	0.215,0.607			
Tmin'	0.105				
Correction method= MULTI-SCAN					
Data completeness= 1.76/0.96		Theta(max) = 27.510			
R(reflections)=	0.0450( 882)	wR2(reflect	ions)= 0.1211( 966)		
S = 1.122	Npar= 4	3			

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 C
```

PLAT125_ALERT_4_C No '_s	ymmetry_spac	e_group_name_Hall' Give	n Please Do !	
PLAT148_ALERT_3_C su on	the a	- Axis is (Too) Large .	0.009 Ang.	
PLAT148_ALERT_3_C su on	the b	- Axis is (Too) Large .	0.0200 Ang.	
PLAT148_ALERT_3_C su on	the c	- Axis is (Too) Large .	0.008 Ang.	

## Alert level G

```
PLAT004_ALERT_5_G Polymeric Structure Found with Dimension ......
                                                                         2 Info
PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF
                                                                    Please Do !
PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large.
                                                                     42.01 Why ?
PLAT301_ALERT_3_G Main Residue Disorder ..... Percentage =
                                                                        11 Note
PLAT328_ALERT_4_G Possible Missing H on sp3? Phosphorus .......
                                                                        P1 Check
PLAT899_ALERT_4_G SHELXL97 is Deprecated and Succeeded by SHELXL
                                                                      2014 Note
```

```
0 ALERT level A = Most likely a serious problem - resolve or explain
0 ALERT level B = A potentially serious problem, consider carefully
4 ALERT level C = Check. Ensure it is not caused by an omission or oversight
6 ALERT level G = General information/check it is not something unexpected
0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
1 ALERT type 2 Indicator that the structure model may be wrong or deficient
4 ALERT type 3 Indicator that the structure quality may be low
3 ALERT type 4 Improvement, methodology, query or suggestion
2 ALERT type 5 Informative message, check
```

# checkCIF publication errors

## 🖣 Alert level A

PUBL004 ALERT 1 A The contact author's name and address are missing, \_publ\_contact\_author\_name and \_publ\_contact\_author\_address. PUBL005\_ALERT\_1\_A \_publ\_contact\_author\_email, \_publ\_contact\_author\_fax and \_publ\_contact\_author\_phone are all missing. At least one of these should be present. PUBL006\_ALERT\_1\_A \_publ\_requested\_journal is missing e.g. 'Acta Crystallographica Section C' PUBL008\_ALERT\_1\_A \_publ\_section\_title is missing. Title of paper. PUBL009\_ALERT\_1\_A \_publ\_author\_name is missing. List of author(s) name(s). PUBL010\_ALERT\_1\_A \_publ\_author\_address is missing. Author(s) address(es). PUBL012\_ALERT\_1\_A \_publ\_section\_abstract is missing. Abstract of paper in English.

#### Alert level G

PUBL017\_ALERT\_1\_G The \_publ\_section\_references section is missing or empty.

- 7 ALERT level A = Data missing that is essential or data in wrong format 1 ALERT level G = General alerts. Data that may be required is missing

## **Publication of your CIF**

You should 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 nature of your study may justify the reported deviations from journal submission requirements and the more serious of these should 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.

If level A alerts remain, which you believe to be justified deviations, and you intend to submit this CIF for publication in a journal, you should additionally insert an explanation in your CIF using the Validation Reply Form (VRF) below. This will allow your explanation to be considered as part of the review process.

### Validation response form

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

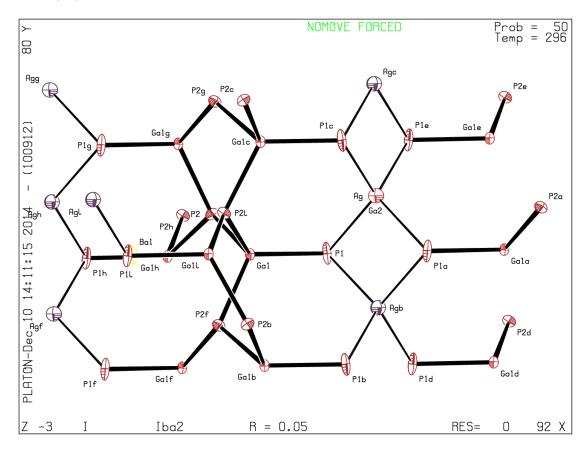
```
# start Validation Reply Form
_vrf_PUBL004_GLOBAL
PROBLEM: The contact author's name and address are missing,
RESPONSE: ...
_vrf_PUBL005_GLOBAL
PROBLEM: _publ_contact_author_email, _publ_contact_author_fax and
RESPONSE: ...
_vrf_PUBL006_GLOBAL
PROBLEM: _publ_requested_journal is missing
RESPONSE: ...
_vrf_PUBL008_GLOBAL
PROBLEM: _publ_section_title is missing. Title of paper.
RESPONSE: ...
_vrf_PUBL009_GLOBAL
PROBLEM: _publ_author_name is missing. List of author(s) name(s).
RESPONSE: ...
_vrf_PUBL010_GLOBAL
PROBLEM: _publ_author_address is missing. Author(s) address(es).
RESPONSE: ...
vrf_PUBL012_GLOBAL
```

```
PROBLEM: _publ_section_abstract is missing.
RESPONSE: ...;
# end Validation Reply Form
```

If you wish to submit your CIF for publication in Acta Crystallographica Section C or E, you should upload your CIF via the web. If your CIF is to form part of a submission to another IUCr journal, you will be asked, either during electronic submission or by the Co-editor handling your paper, to upload your CIF via our web site.

## PLATON version of 20/08/2014; check.def file version of 18/08/2014

Datablock I - ellipsoid plot



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No syntax errors found. CIF dictionary Interpreting this report

## **Datablock: I**

Bond precision: As-Ga = 0.0009 A Wavelength=0.71073 Cell: a=7.4769(8)b=18.5766(19) c=6.7590(7)alpha=90 beta=90 gamma=90 Temperature: 296 K Calculated Reported Volume 938.79(17) 938.79(17) Iba2 Space group Iba2 Hall group I 2 -2c Moiety formula Ag As8 Ga5, 4(Ba) ? Sum formula Ag As8 Ba4 Ga5 Ag As8 Ba4 Ga5 Mr 1605.15 1605.19 5.678 5.679 Dx,g cm-3 2 2 Ζ Mu (mm-1)30.277 30.277 F000 1380.0 1380.0 1379.83 F000′ h,k,lmax 9,24,8 9,24,8 1080[ 589] Nref 1078 0.350,0.546 0.065,0.583 Tmin,Tmax Tmin' 0.002 Correction method= MULTI-SCAN Data completeness= 1.83/1.00 Theta(max) = 27.500 R(reflections) = 0.0207( 1056) wR2(reflections) = 0.0499( 1078) S = 1.172Npar= 44

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 G

```
PLAT004_ALERT_5_G Polymeric Structure Found with Dimension ...... 2 Info
PLAT005_ALERT_5_G No _iucr_refine_instructions_details in the CIF Please Do !
PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) Ag -- As1 .. 12.5 su
PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) As1 -- Ga1 .. 5.0 su
PLAT232_ALERT_2_G Hirshfeld Test Diff (M-X) As1 -- Ga2 .. 12.5 su
PLAT301_ALERT_3_G Main Residue Disorder ....... Percentage = 11 Note
PLAT899_ALERT_4_G SHELXL97 is Deprecated and Succeeded by SHELXL 2014 Note
```

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## Alert level A

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RESPONSE: ...
_vrf_PUBL005_GLOBAL
PROBLEM: _publ_contact_author_email, _publ_contact_author_fax and
RESPONSE: ...
_vrf_PUBL006_GLOBAL
PROBLEM: _publ_requested_journal is missing
RESPONSE: ...
_vrf_PUBL008_GLOBAL
PROBLEM: _publ_section_title is missing. Title of paper.
RESPONSE: ...
_vrf_PUBL009_GLOBAL
PROBLEM: _publ_author_name is missing. List of author(s) name(s).
RESPONSE: ...
_vrf_PUBL010_GLOBAL
PROBLEM: _publ_author_address is missing. Author(s) address(es).
RESPONSE: ...
vrf_PUBL012_GLOBAL
```

```
PROBLEM: _publ_section_abstract is missing.
RESPONSE: ...;
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