

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: I

Bond precision:	C-C = 0.0181 Å	Wavelength=0.71073
Cell:	a=7.5899(16)	b=27.685(2) c=8.6395(18)
	alpha=90	beta=101.451(2) gamma=90
Temperature:	298 K	
	Calculated	Reported
Volume	1779.3(5)	1779.3(5)
Space group	P 21/c	P21/c
Hall group	-P 2ybc	?
Moiety formula	C14 H10 Br2 Cl2 Co O6	?
Sum formula	C14 H10 Br2 Cl2 Co O6	C14 H10 Br2 Cl2 Co O6
Mr	563.85	563.87
Dx, g cm-3	2.105	2.105
Z	4	4
Mu (mm-1)	5.784	5.784
F000	1092.0	1092.0
F000'	1092.84	
h, k, lmax	9, 33, 10	9, 33, 9
Nref	3220	2807
Tmin, Tmax	0.367, 0.420	0.422, 0.477
Tmin'	0.339	

Correction method= # Reported T Limits: Tmin=0.422 Tmax=0.477
AbsCorr = MULTI-SCAN

Data completeness= 0.872 Theta(max)= 25.250

R(reflections)= 0.0812(1763) wR2(reflections)= 0.1903(2807)

S = 1.053 Npar= 226

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 B

PLAT341_ALERT_3_B	Low Bond Precision on	C-C Bonds		0.01814	Ang.
PLAT415_ALERT_2_B	Short Inter D-H..H-X	H6B	.. H7 ..	2.01	Ang.
PLAT420_ALERT_2_B	D-H Without Acceptor	05	-- H5A ...	Please	Check
PLAT420_ALERT_2_B	D-H Without Acceptor	06	-- H6B ...	Please	Check

Alert level C

PLAT018_ALERT_1_C	_diffn_measured_fraction_theta_max	.NE. *_full		!	Check
PLAT048_ALERT_1_C	MoietyFormula	Not Given (or Incomplete)		Please	Check
PLAT125_ALERT_4_C	No '_symmetry_space_group_name_Hall'	Given		Please	Do !
PLAT234_ALERT_4_C	Large Hirshfeld Difference	C1 -- C2 ..		0.17	Ang.
PLAT234_ALERT_4_C	Large Hirshfeld Difference	C1 -- C7 ..		0.17	Ang.

Alert level G

PLAT003_ALERT_2_G	Number of Uiso or Uij	Restrained non-H Atoms	...	2	Report
PLAT005_ALERT_5_G	No Embedded Refinement Details	found in the CIF		Please	Do !
PLAT007_ALERT_5_G	Number of Unrefined Donor-H Atoms			4	Report
PLAT083_ALERT_2_G	SHELXL Second Parameter in WGHT	Unusually Large		7.54	Why ?
PLAT093_ALERT_1_G	No s.u.'s on H-positions,	Refinement Reported as		mixed	Check
PLAT860_ALERT_3_G	Number of Least-Squares	Restraints		12	Note
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
4 **ALERT level B** = A potentially serious problem, consider carefully
5 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight
7 **ALERT level G** = General information/check it is not something unexpected

3 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
5 ALERT type 2 Indicator that the structure model may be wrong or deficient
2 ALERT type 3 Indicator that the structure quality may be low
4 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: ...
;
```

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_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 you wish to submit your CIF for publication in IUCrData 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 11/08/2016; check.def file version of 04/08/2016

Datablock I - ellipsoid plot

