checkCIF/PLATON report

Structure factors have been supplied for datablock(s) DS_4_268_0m_a

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: DS_4_268_0m_a

```
Wavelength=0.71073
Bond precision: C-C = 0.0034 A
Cell:
                  a=29.831(8)
                                   b=10.125(3)
                                                         c=14.075(4)
                  alpha=90
                                   beta=114.948(3)
                                                         gamma=90
Temperature:
                  150 K
                Calculated
                                             Reported
Volume
                 3854.5(19)
                                             3854.5(19)
Space group
                C 2/c
                                             C 2/c
                                             -C 2yc
Hall group
                -C 2yc
Moiety formula C14 H30 Cl N3 O2 Ti
                                             C14H30ClN3O2Ti
Sum formula
                C14 H30 Cl N3 O2 Ti
                                             C14 H30 Cl N3 O2 Ti
                 355.73
                                             355.76
Mr
                                             1.226
Dx,g cm-3
                 1.226
Mu (mm-1)
                 0.590
                                             0.590
F000
                 1520.0
                                             1520.0
F000'
                 1523.84
h, k, lmax
                 40,13,19
                                             40,13,18
Nref
                 4991
                                             4734
Tmin, Tmax
                 0.723,0.915
                                             0.592,0.746
Tmin'
                 0.708
Correction method= # Reported T Limits: Tmin=0.592 Tmax=0.746
AbsCorr = MULTI-SCAN
Data completeness= 0.949
                                    Theta (max) = 28.705
                                                       wR2 (reflections) =
R(reflections) = 0.0325(3818)
                                                       0.0958 (4734)
S = 1.034
                           Npar= 200
```

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
{\tt CELLT02\_ALERT\_1\_C} The cell measurement temperature is greater than the
           given melting point of the compound.
           Value of measurement temperature given =
           Value of melting point given = 85.000
PLAT042_ALERT_1_C Calc. and Reported MoietyFormula Strings Differ
                                                                     Please Check
             Calc: C14 H30 Cl N3 O2 Ti
             Rep.: C14H30ClN302Ti
                        'MainMol' Ueq as Compared to Neighbors of
PLAT242_ALERT_2_C Low
                                                                        C11 Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                                         2 Report
             -16 0 16, -14 0 16,
Alert level G
PLAT128_ALERT_4_G Alternate Setting for Input Space Group C2/C
                                                                       I2/a Note
PLAT760_ALERT_1_G CIF Contains no Torsion Angles ......
                                                                        ? Info
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                        255 Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity .....
                                                                        4.7 Low
PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value ......
                                                                       2.01 Note
             Predicted wR2: Based on SigI**2 4.77 or SHELX Weight 9.47
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                          2 Info
  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
  3 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
  2 ALERT type 3 Indicator that the structure quality may be low
```

checkCIF publication errors

1 ALERT type 5 Informative message, check

2 ALERT type 4 Improvement, methodology, query or suggestion

```
PUBL012_ALERT_1_A _publ_section_abstract is missing. Abstract of paper in English.
```

```
7 ALERT level A = Data missing that is essential or data in wrong format 0 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 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.

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