checkCIF/PLATON report

Structure factors have been supplied for datablock(s) xg_phcho_zn_new_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: xg_phcho_zn_new_0m_a

```
C-C = 0.0027 A
Bond precision:
                                           Wavelength=1.54178
                  a=13.3489(2)
Cell:
                                   b=14.1103(2)
                                                       c=18.9440(3)
                                   beta=91.461(1)
                  alpha=90
                                                       gamma=90
                  100 K
Temperature:
                Calculated
                                            Reported
Volume
                3567.08(9)
                                            3567.08(9)
Space group
                P 21/n
                                            P 1 21/n 1
Hall group
                −P 2yn
                                            −P 2yn
                C70 H90 B2 N4 O4 Zn2, C6
                                            C70 H90 B2 N4 O4 Zn2, C6
Moiety formula
                H14
Sum formula
                C76 H104 B2 N4 O4 Zn2
                                            C76 H104 B2 N4 O4 Zn2
                1290.03
                                            1289.99
Dx,g cm-3
                1.201
                                            1.201
                                            2
                2
                1.204
                                            1.204
Mu (mm-1)
                                            1380.0
F000
                1380.0
F000'
                1377.00
h,k,lmax
                16,17,23
                                            15,17,23
Nref
                6771
                                            6712
Tmin, Tmax
                0.917,0.953
                                            0.672,0.753
Tmin'
                0.908
Correction method= # Reported T Limits: Tmin=0.672 Tmax=0.753
AbsCorr = MULTI-SCAN
Data completeness= 0.991
                                   Theta(max) = 70.019
                                                      wR2 (reflections) =
R(reflections) = 0.0336(6115)
                                                       0.0909(6712)
S = 1.057
                           Npar= 437
```

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
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L=
                                                            0.600
                                                                          35 Report
                             1 0, 15 1 0, 13 2 0, -15 0 1, 15
              14 0 0, 14
                                                                         0 1,
              -15 1 1, -14
                             1 1, -13 1 1, -15
                                                  2 1, -14
                                                             2 1, -14
             -15 1 2, -14
                             1 2, -13 1 2, -15
                                                   2 2, -13 2 2, -15
              -13 0 3, -15
                             1 3, -14 1 3, -13
                                                  1 3, -15
                                                              2 3, -14
              -15 1 4, -14 1 4, -15 2 4, -14 2 4, -15 0 5, -15
              -15 1 6, -15 0 7, -15 1 7, -15 1 8, -13 0 9,
   Alert level G
PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite
                                                                           6 Note
PLAT003_ALERT_2_G Number of Uiso or U(i,j) Restrained non-H Atoms
                                                                           6 Report
{\tt PLAT172\_ALERT\_4\_G\ The\ CIF-Embedded\ .res\ File\ Contains\ DFIX\ Records}
                                                                           1 Report
{\tt PLAT176\_ALERT\_4\_G\ The\ CIF-Embedded\ .res\ File\ Contains\ SADI\ Records}
                                                                           3 Report
{\tt PLAT178\_ALERT\_4\_G\ The\ CIF-Embedded\ .res\ File\ Contains\ SIMU\ Records}
                                                                           1 Report
PLAT188_ALERT_3_G A Non-default SIMU Restraint Value has been used
                                                                     0.0100 Report
PLAT191_ALERT_3_G A Non-default SADI Restraint Value has been used
                                                                      0.0400 Report
                                                                       100% Note
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd 2)
PLAT302_ALERT_4_G Anion/Solvent/Minor-Residue Disorder (Resd
                                                               3)
                                                                       100% Note
                                                                      10.70 Check
PLAT304_ALERT_4_G Non-Integer Number of Atoms in ..... (Resd
                                                             2)
PLAT304_ALERT_4_G Non-Integer Number of Atoms in ..... (Resd
                                                            3)
                                                                       9.30 Check
PLAT395_ALERT_2_G Deviating X-O-Y Angle From 120 for 0003 .
                                                                       107.6 Degree
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels ......
                                                                          98 Note
                                                                    C008
              Zn01
                    0002 0003
                                   N004
                                           N005 C006 C007
             C009
                                                    COOD
                     COOA
                             C00B
                                     H00B
                                             COOC
                                                             HOOD
                                                                     COOE
                     HOOF
                             COOG
                                             H00C
                                                     HOOE
              COOF
                                     HOOA
                                                             C00H
                                                                     H00H
              COOI
                     HOOI
                             C00J
                                     C00K
                                             COOL
                                                     HOOG
                                                             HOOJ
                                                                     H00K
              C00M
                     MO O H
                             COON
                                     HOON
                                             C000
                                                     H000
                                                             C00P
                                                                     COOQ
              H00Q
                     C00R
                             H00R
                                     COOS
                                             HOOL
                                                     H00P
                                                             H00S
             HOOT
                     COOU
                             HOOU
                                     COOV
                                             HOOV
                                                     COOW
                                                             HOOW
                                                                     COOX
             H00X
                     BOOY
                             COOZ
                                     HOOY
                                             На
                                                     C010
                                                             H01A
                                                                     H01B
                                             H01F
                                                     C012
             H01C
                     C011
                             H01D
                                     H01E
                                                             H01G
                                                                     H01H
                                                     C014
             H01T
                     C013
                             H01J
                                     H01K
                                             H01L
                                                             H01M
                                                                     H01N
             H010
                     C015
                             H01P
                                     H01Q
                                             H01R
                                                     C016
                                                             H01S
                                                                     H01T
             H01U
                     C017
                             H01V
                                     H01W
                                             C018
                                                     H01X
                                                             H01Y
             H0A
                     H0B
PLAT773_ALERT_2_G Check long C-C Bond in CIF: C1
                                                     --C1
                                                                        1.75 Ang.
PLAT860_ALERT_3_G Number of Least-Squares Restraints .....
                                                                          64 Note
{\tt PLAT883\_ALERT\_1\_G\ No\ Info/Value\ for\ \_atom\_sites\_solution\_primary\ .}
                                                                      Please Do !
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                           4 Note
PLAT933_ALERT_2_G Number of HKL-OMIT Records in Embedded .res File
                                                                           6 Note
```

PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value

PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.

-14 0 4, -14 1 1, -14 1 2, -14 1 3, -13 0 3,

Predicted wR2: Based on SigI**2 2.36 or SHELX Weight 8.60

14 0 0,

3.861 Note

11 Info

⁰ ALERT level A = Most likely a serious problem - resolve or explain

O ALERT level B = A potentially serious problem, consider carefully

¹ ALERT level C = Check. Ensure it is not caused by an omission or oversight

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20 ALERT level G = General information/check it is not something unexpected
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1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data 6 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 9 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* or *IUCrData*, 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 22/08/2024; check.def file version of 21/08/2024

