checkCIF/PLATON report

Structure factors have been supplied for datablock(s) xg_cn2cy2_zn_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_cn2cy2_zn_0m_a

```
Bond precision: C-C = 0.0029 A
                                          Wavelength=1.54178
                 a=12.2475(3)
Cell:
                                                     c=16.4279(4)
                                  b=19.2194(5)
                                  beta=95.633(2)
                 alpha=90
                                                     gamma=90
                 100 K
Temperature:
                Calculated
                                           Reported
Volume
                3848.28(17)
                                           3848.28(17)
Space group
               P 21/n
                                           P 1 21/n 1
Hall group
               −P 2yn
                                           −P 2yn
Moiety formula C41 H56 B N3 O2 Zn
                                          C41 H56 B N3 O2 Zn
Sum formula
              C41 H56 B N3 O2 Zn
                                           C41 H56 B N3 O2 Zn
Mr
                699.09
                                           699.06
                                           1.207
               1.207
Dx,g cm-3
                4
                                           4
Mu (mm-1)
               1.162
                                           1.162
F000
                1496.0
                                           1496.0
F000'
               1493.31
h,k,lmax
                14,23,19
                                           14,23,19
Nref
                7058
                                           6993
Tmin, Tmax
                0.911,0.944
                                           0.666,0.753
Tmin'
                0.911
Correction method= # Reported T Limits: Tmin=0.666 Tmax=0.753
AbsCorr = MULTI-SCAN
Data completeness= 0.991
                                  Theta(max) = 68.274
                                                     wR2 (reflections) =
R(reflections) = 0.0350(5882)
                                                     0.0873 (6993)
S = 1.017
                          Npar= 443
```

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
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```
PLAT767_ALERT_4_C INS Embedded LIST 6 Instruction Should be LIST 4
                                                             Please Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.600
                                                              46 Report
              7 20 0,
                                                   -7 20 1,
                                                             7 20 1,
                      6 21 0,
                                1 23 0, -8 19 1,
              4 22 1,
                      0 23 1,
                                -9 18 2, -8 19 2, 2 22 2,
                                                             3 22 2,
                      2 22 3,
                                3 22 3, 14 0 4, -8 0 12, -7 1 12,
             -9 18 3,
             -7 0 13,
                      -8 1 13,
                                1 14 15,
                                          2 14 15, -3 12 16, -2 12 16,
             -1 12 16,
                                          -1 13 16,
                                                   0 13 16,
                                                             1 13 16,
                      -3 13 16,
                                -2 13 16,
                                                             -5 7 18,
             -4 10 17,
                      -3 10 17,
                                -3 11 17,
                                          -2 11 17,
                                                   -1 11 17,
                                -3 9 18,
             -4 7 18,
                      -4 8 18,
                                          -5 0 19, -5 1 19,
             -5 2 19,
                                -4 3 19,
                      -4
                          2 19,
                                          -4 4 19,
```

Alert level G

```
PLAT395_ALERT_2_G Deviating X-O-Y Angle From 120 for O1
                                                                     105.3 Degree
                                                             .
PLAT395_ALERT_2_G Deviating X-O-Y
                                  Angle From 120 for 02
                                                                     105.7 Degree
PLAT720_ALERT_4_G Number of Unusual/Non-Standard Labels .....
                                                                         1 Note
PLAT794_ALERT_5_G Tentative Bond Valency for Zn1
                                                                      1.70 Info
                                                    (II)
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
                                                                       19 Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity .....
                                                                       3.6 Low
PLAT969_ALERT_5_G The 'Henn et al.' R-Factor-gap value ......
                                                                    1.471 Note
             Predicted wR2: Based on SigI**2 5.94 or SHELX Weight 8.58
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                        10 Info
```

```
0 ALERT level A = Most likely a serious problem - resolve or explain
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- 1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 3 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
- 3 ALERT type 4 Improvement, methodology, query or suggestion
- 2 ALERT type 5 Informative message, check

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

² ALERT level C = Check. Ensure it is not caused by an omission or oversight

⁹ ALERT level G = General information/check it is not something unexpected

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

