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: new_sq

```
Bond precision: C-C = 0.0102 A
                                       Wavelength=0.70000
Cell:
                a=30.373(4)
                                 b=30.373(4)
                                                c=34.439(7)
                 alpha=90
                                 beta=90
                                                  gamma=90
Temperature:
                 313 K
               Calculated
                                        Reported
Volume
               31771(11)
                                         31772(11)
              P 4/m n c
                                        P 4/m n c
Space group
Hall group
               -P 4 2n
                                         -P 4 2n
               2(C79 H41.60 N7.40 O17.90
Moiety formula
               Zn5.50) [+ solvent]
               C158 H83.20 N14.80 O35.80 C158 H83.20 N14.80 O35.80
Sum formula
               Zn11 [+ solvent]
                                         Zn11
               3480.89
                                        3480.66
Mr
              0.728
                                        0.728
Dx,q cm-3
               4
Mu (mm-1)
              0.818
                                         0.818
F000
               7004.8
                                        7005.0
F000′
              7020.42
h,k,lmax
               36,36,41
                                        36,36,41
               14932
Nref
                                        14881
Tmin,Tmax
              0.822,0.863
                                        0.715,0.867
Tmin'
               0.698
Correction method= # Reported T Limits: Tmin=0.715 Tmax=0.867
AbsCorr = MULTI-SCANS
Data completeness= 0.997
                                Theta(max) = 25.000
R(reflections) = 0.1012( 9872) wR2(reflections) = 0.3769( 14881)
S = 1.464
                         Npar= 511
```

Click on the hyperlinks for more details of the test.

```
风 Alert level B
PLAT084_ALERT_3_B High wR2 Value (i.e. > 0.25) .....
                                                                          0.38 Report
PLAT241_ALERT_2_B High 'MainMol' Ueq as Compared to Neighbors of
                                                                            02W Check
PLAT241_ALERT_2_B High 'MainMol' Ueq as Compared to Neighbors of
                                                                             03 Check
PLAT241_ALERT_2_B High 'MainMol' Ueq as Compared to Neighbors of PLAT241_ALERT_2_B High 'MainMol' Ueq as Compared to Neighbors of PLAT242_ALERT_2_B Low 'MainMol' Ueq as Compared to Neighbors of
                                                                             04 Check
                                                                            C33 Check
                                                                           Zn5 Check
   Alert level C
ABSMU01_ALERT_1_C The ratio of given/expected absorption coefficient lies
               outside the range 0.99 <> 1.01
            Calculated value of mu = 0.853
Value of mu given = 0.818
RADNW01_ALERT_1_C The radiation wavelength lies outside the expected range
            for the supplied radiation type. Expected range 0.71065-0.71075
            Wavelength given = 0.70000
PLAT094_ALERT_2_C Ratio of Maximum / Minimum Residual Density ....
                                                                          2.37 Report
PLAT213_ALERT_2_C Atom O1W has ADP max/min Ratio .....
PLAT213_ALERT_2_C Atom C20 has ADP max/min Ratio .....
                                                                             3.2 prolat
                                                                            3.1 prolat
PLAT220_ALERT_2_C Non-Solvent Resd 1 C Ueq(max)/Ueq(min) Range
                                                                            3.3 Ratio
                                                                           5.2 Ratio
PLAT220_ALERT_2_C Non-Solvent Resd 1 O Ueq(max)/Ueq(min) Range
                                                                            01 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            02 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            05 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            06 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            N2 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            N4 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            C3 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                            C8 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                           C16 Check
                                                                           C17 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                           C23 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                           C25 Check
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                           C36 Check
                                                                           Zn2 Check
                         'MainMol' Ueq as Compared to Neighbors of
PLAT242_ALERT_2_C Low
PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of
                                                                           N1P Check
                       'MainMol' Ueq as Compared to Neighbors of
                                                                           C10 Check
PLAT242_ALERT_2_C Low
                       'MainMol' Ueq as Compared to Neighbors of
                                                                           C13 Check
PLAT242_ALERT_2_C Low
                                                                           C19 Check
C21 Check
                       'MainMol' Ueq as Compared to Neighbors of 'MainMol' Ueq as Compared to Neighbors of
PLAT242_ALERT_2_C Low
PLAT242_ALERT_2_C Low
                       'MainMol' Ueq as Compared to Neighbors of 'MainMol' Ueq as Compared to Neighbors of
                                                                           C22 Check
PLAT242_ALERT_2_C Low
                                                                           C24 Check
PLAT242_ALERT_2_C Low
                                                                           C30 Check
                         'MainMol' Ueq as Compared to Neighbors of
PLAT242_ALERT_2_C Low
                                                                           C31 Check
PLAT242_ALERT_2_C Low
                         'MainMol' Ueq as Compared to Neighbors of
PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of
                                                                           C32 Check
                                                                        C35 Check
2.1 Note
PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor ....
PLAT341_ALERT_3_C Low Bond Precision on C-C Bonds ...... 0.01017 Ang.
PLAT731_ALERT_1_C Bond Calc 1.466(11), Rep 1.47(6) .....
                                                                              6 su-Rat
              C27 -C35
                                 1.555 7.755 ..... # 67 Check
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Alert level G

ABSTY01_ALERT_1_G Extra text has been found in the _exptl_absorpt_correction_type field, which should be only a single keyword. A literature

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PLAT002_ALERT_2_G Number of Distance or Angle Restraints on AtSite
                                                                                                      15 Note
PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ...
                                                                                                      22 Report
PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension
                                                                                                      3 Info
PLAT068_ALERT_1_G Reported F000 Differs from Calcd (or Missing)...
                                                                                              Please Check
PLAT072_ALERT_2_G SHELXL First Parameter in WGHT Unusually Large
                                                                                                  0.20 Report
                                                                                               0.70000 Ang.
PLAT092_ALERT_4_G Check: Wavelength given is not Cu,Ga,Mo,Ag,In Ka
PLAT172_ALERT_4_G The CIF-Embedded .res File Contains DFIX Records
                                                                                                      11 Report
PLAT173_ALERT_4_G The CIF-Embedded .res File Contains DANG Records
                                                                                                      8 Report
PLAT174_ALERT_4_G The CIF-Embedded .res File Contains FLAT Records
                                                                                                      4 Report
PLAT177_ALERT_4_G The CIF-Embedded .res File Contains DELU Records
                                                                                                      4 Report
PLAT178_ALERT_4_G The CIF-Embedded .res File Contains SIMU Records
                                                                                                       4 Report
PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records
                                                                                                       5 Report
PLAT300_ALERT_4_G Atom Site Occupancy of Zn4
                                                                is Constrained at
                                                                                                  0.55 Check
                                                                                                  0.45 Check
PLAT300_ALERT_4_G Atom Site Occupancy of Zn3
                                                                 is Constrained at
                                                                 is Constrained at
                                                                                                  0.45 Check
PLAT300_ALERT_4_G Atom Site Occupancy of O1W
                                                               is Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of C1P
                                                                                                   0.5 Check
                                                                                                    0.5 Check
PLAT300_ALERT_4_G Atom Site Occupancy of C2P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C4P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C5P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C6P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C7P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C8P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of C8P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H1P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H2P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H4P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H5P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H5P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H7P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H7P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H7P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H8P is Constrained at PLAT300_ALERT_4_G Atom Site Occupancy of H8P
PLAT300_ALERT_4_G Atom Site Occupancy of C2P
                                                                  is Constrained at
                                                                                                  0.45 Check
                                                                                                  0.45 Check
0.45 Check
0.45 Check
0.45 Check
0.45 Check
                                                                                                  0.45 Check
                                                                                                  0.5 Check
                                                                                                   0.5 Check
                                                                                                  0.45 Check
                                                                                                  0.45 Check
                                                                                                  0.45 Check
PLAT300_ALERT_4_G Atom Site Occupancy of H8P is Constrained at
                                                                                                  0.45 Check
PLAT301_ALERT_3_G Main Residue Disorder ......(Resd 1)..
                                                                                                    9% Note
PLAT606_ALERT_4_G VERY LARGE Solvent Accessible VOID(S) in Structure
                                                                                                      ! Info
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                                                   150 Check
                                                                                             25.63 Deg.
                   ZN4 -O2 -ZN3 1.555 1.555 1.555
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                                                    154 Check
                   ZN3 -O4 -ZN4 1.555 1.555 1.555
                                                                                             18.16 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                                                  158 Check
                   ZN4 -O6 -ZN3 1.555 1.555 1.555
                                                                                             19.53 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                                                     192 Check
                   ZN4 -O2W -ZN3 1.555 1.555 1.555
                                                                                             26.62 Deg.
PLAT860_ALERT_3_G Number of Least-Squares Restraints .....
                                                                                                     285 Note
PLAT869_ALERT_4_G ALERTS Related to the use of SQUEEZE Suppressed
                                                                                                       ! Info
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0 ALERT level A = Most likely a serious problem - resolve or explain
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⁶ ALERT level B = A potentially serious problem, consider carefully

³⁵ ALERT level C = Check. Ensure it is not caused by an omission or oversight

³⁸ **ALERT level G** = General information/check it is not something unexpected

⁵ ALERT type 1 CIF construction/syntax error, inconsistent or missing data

³⁹ 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

³⁰ 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 13/08/2017; check.def file version of 27/07/2017

