checkCIF/PLATON report

Structure factors have been supplied for datablock(s) exp_2188_sq_sq

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: exp_2188_sq_sq

```
Bond precision: C-C = 0.0103 A
                                            Wavelength=1.54184
Cell:
                 a=15.8106(14)
                                   b=11.2102(10)
                                                          c=17.812(3)
                 alpha=90
                                   beta=105.385(11)
                                                          gamma=90
Temperature:
                 100 K
                 Calculated
                                             Reported
Volume
                 3043.9(7)
                                             3043.8(6)
Space group
                P 21/c
                                             P 1 21/c 1
Hall group
                -P 2ybc
                                             -P 2ybc
Moiety formula C64 H54 N6 O Pd [+ solvent] C64 H54 N6 O Pd
Sum formula
                C64 H54 N6 O Pd [+ solvent] C64 H54 N6 O Pd
                 1029.53
                                             1029.53
Mr
                                             1.123
Dx,g cm-3
                 1.123
                 2
                                             2
                 2.781
                                             2.781
Mu (mm-1)
F000
                 1068.0
                                             1068.0
F000'
                 1070.90
h, k, lmax
                 18,13,21
                                             18,13,21
Nref
                 5380
                                             5374
Tmin, Tmax
                 0.602,0.757
                                             0.540,1.000
                 0.546
Tmin'
Correction method= # Reported T Limits: Tmin=0.540 Tmax=1.000
AbsCorr = MULTI-SCAN
Data completeness= 0.999
                                    Theta (max) = 66.587
                                                       wR2 (reflections) =
R(reflections) = 0.0900(3484)
                                                        0.2829 (5374)
S = 1.054
                           Npar= 377
```

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.

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Alert level C
PLAT084_ALERT_3_C High wR2 Value (i.e. > 0.25) ......
                                                                   0.28 Report
PLAT213_ALERT_2_C Atom C27
                                    has ADP max/min Ratio .....
                                                                     3.6 prolat
PLAT220_ALERT_2_C NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range
                                                                     3.2 Ratio
PLAT230_ALERT_2_C Hirshfeld Test Diff for C9
                                                 --C10 .
                                                                     5.6 s.u.
PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of
                                                                     C24 Check
PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of
                                                                     C23 Check
PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor ....
                                                                     2.2 Note
PLAT342_ALERT_3_C Low Bond Precision on C-C Bonds .....
                                                                  0.01033 Ang.
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance .....
                                                                  4.599 Check
PLAT906_ALERT_3_C Large K Value in the Analysis of Variance .....
                                                                    2.193 Check
PLAT911_ALERT_3_C Missing FCF Refl Between Thmin & STh/L= 0.595
                                                                       6 Report
Alert level G
PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ...
                                                                       9 Report
PLAT072_ALERT_2_G SHELXL First Parameter in WGHT Unusually Large
                                                                   0.15 Report
PLAT177_ALERT_4_G The CIF-Embedded .res File Contains DELU Records
                                                                       1 Report
PLAT186_ALERT_4_G The CIF-Embedded .res File Contains ISOR Records
                                                                       1 Report
PLAT300_ALERT_4_G Atom Site Occupancy of N3
                                                                     0.5 Check
                                          Constrained at
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of N4
                                                                     0.5 Check
                                               Constrained at
                                                                    0.25 Check
PLAT300_ALERT_4_G Atom Site Occupancy of O1A
                                               Constrained at
                                                                   0.25 Check
PLAT300_ALERT_4_G Atom Site Occupancy of O2A
PLAT300_ALERT_4_G Atom Site Occupancy of C32
                                                                     0.5 Check
                                               Constrained at
PLAT300_ALERT_4_G Atom Site Occupancy of C32A
                                                                    0.5 Check
                                               Constrained at
PLAT301_ALERT_3_G Main Residue Disorder ......(Resd 1 )
                                                                      8% Note
PLAT432_ALERT_2_G Short Inter X...Y Contact O1A ..C13 .
                                                                    2.89 Ang.
                                                                4_576 Check
                                           x, 3/2-y, 1/2+z =
PLAT432_ALERT_2_G Short Inter X...Y Contact O1A ...C7
                                                                    2.94 Ang.
                                           x, 3/2-y, 1/2+z =
                                                                4_576 Check
PLAT432_ALERT_2_G Short Inter X...Y Contact O1A ...C8
                                                                    2.98 Ang.
                                                                4_576 Check
                                           x, 3/2-y, 1/2+z =
PLAT432_ALERT_2_G Short Inter X...Y Contact O2A ...C9
                                                                     2.91 Ang.
                                        1-x, -1/2+y, 1/2-z =
                                                                2_645 Check
PLAT432_ALERT_2_G Short Inter X...Y Contact O2A ..C14
                                                                    2.93 Ang.
                                        1-x, -1/2+y, 1/2-z =
                                                                2_645 Check
PLAT432_ALERT_2_G Short Inter X...Y Contact O2A ..C8
                                                                   3.00 Ang.
                                                                2_645 Check
                                        1-x, -1/2+y, 1/2-z =
PLAT606_ALERT_4_G Solvent Accessible VOID(S) in Structure ......
                                                                       ! Info
PLAT793_ALERT_4_G Model has Chirality at C32
                                              (Centro SPGR)
                                                                       S Verify
                                                                      77 Note
PLAT860_ALERT_3_G Number of Least-Squares Restraints .....
PLAT869_ALERT_4_G ALERTS Related to the Use of SQUEEZE Suppressed
                                                                      ! Info
PLAT909_ALERT_3_G Percentage of I>2sig(I) Data at Theta(Max) Still
                                                                     36% Note
PLAT941_ALERT_3_G Average HKL Measurement Multiplicity ......
                                                                     1.9 Low
PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density.
                                                                       0 Info
PLAT992_ALERT_5_G Repd & Actual _reflns_number_gt Values Differ by
                                                                       4 Check
```

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

⁰ **ALERT level B** = A potentially serious problem, consider carefully

¹¹ **ALERT level C** = Check. Ensure it is not caused by an omission or oversight

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

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O ALERT type 1 CIF construction/syntax error, inconsistent or missing data
15 ALERT type 2 Indicator that the structure model may be wrong or deficient
9 ALERT type 3 Indicator that the structure quality may be low
11 ALERT type 4 Improvement, methodology, query or suggestion
1 ALERT type 5 Informative message, check
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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 18/05/2022; check.def file version of 17/05/2022

