checkCIF (basic structural check) running

Checking for embedded fcf data in CIF ...

Found embedded fcf data in CIF. Extracting fcf data from uploaded CIF, please wait

checkCIF/PLATON (basic structural check)

Structure factors have been supplied for datablock(s) mo_dm15738_0m

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.

No syntax errors found.

CIF dictionary

Please wait while processing

Interpreting this report

776.44

Structure factor report

Datablock: mo_dm15738_0m

Bond precision: C-C = 0.0040 A Wavelength=0.71073 Cell: a=15.801(2) b=13.9759(18) c=19.829(3)

alpha=90 beta=97.419(3) gamma=90

Temperature: 133 K

Sum formula C47 H57 Mg N3 O2 Si2 C47 H57 Mg N3 O2 Si2

Dx, g cm-3 1.188 1.188 7. 4 4 Mu (mm-1)0.137 0.137 F000 1664.0 1664.0 F000' 1665.32 19, 17, 24 19, 17, 24 h. k. lmax

776.45

Nref 8547 8546
Tmin, Tmax 0. 972, 0. 982 0. 637, 0. 746

ſmin' 0.972

Correction method= # Reported T Limits: Tmin=0.637 Tmax=0.746 AbsCorr = MULTI-

SCAN

Data completeness= 1.000 Theta(max)= 26.000

R(reflections) = 0.0520(5012) wR2(reflections) = 0.1285(8546)

S = 1.003 Npar= 557

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 B

PLAT410_ALERT_2_B Short Intra H...H Contact H8A .. H22C .. 1.80 Ang.

Alert level C

PLAT410_ALERT_2_C Short Intra H...H Contact H7B .. H17' .. 1.91 Ang.
PLAT410_ALERT_2_C Short Intra H...H Contact H8A .. H22A .. 1.98 Ang.
PLAT905_ALERT_3_C Negative K value in the Analysis of Variance ... -3.655 Report

Alert level G

PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ... 12 Report PLAT300_ALERT_4_G Atom Site Occupancy of >C17 is Constrained at 0.700 Check

And 33 other PLAT300 Alerts

More ...

```
PLAT301_ALERT_3_G Main Residue Disorder ............ Percentage = 11 Note
PLAT860_ALERT_3_G Number of Least-Squares Restraints ............. 72 Note
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Th(Min) ... 1 Report
```

```
    0 ALERT level A = Most likely a serious problem - resolve or explain
    1 ALERT level B = A potentially serious problem, consider carefully
    3 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
```

- 0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
- 4 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
- 34 ALERT type 4 Improvement, methodology, query or suggestion
- 0 ALERT type 5 Informative message, check

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Publication of your CIF in IUCr journals

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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 21/06/2015; check.def file version of 21/06/2015

Datablock mo_dm15738_0m - ellipsoid plot



checkCIF (basic structural check) running

Checking for embedded fcf data in CIF ...

Found embedded fcf data in CIF. Extracting fcf data from uploaded CIF, please wait

checkCIF/PLATON (basic structural check)

Structure factors have been supplied for datablock(s) mo_dm15804_0m

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No syntax errors found. Please wait while processing \dots CIF dictionary Interpreting this report

Structure factor report

Datablock: mo_dm15804_0m

Bond precision:		C-C = 0.0093	A	Wavelength=0.71073
Cell:	a=11.371(4)	b=19.87	71 (7) c=20. 675	(7)
	alpha=90	beta=90	gamma=90	
Temperatur	e:296 K			
		Calculated		Reported
Volume		4672(3)		4671(3)
Space group		P 21 21 21		P 21 21 21
Hall group		P 2ac 2ab		P 2ac 2ab
Moiety formula		C51 H57 Mg N3 O2 Si2		?
Sum formul	a	C51 H57 Mg N3 0	2 Si2	C51 H57 Mg N3 O2 Si2
Mr		824. 49		824. 48
Dx, g cm-3		1. 172		1. 172
Z		4		4
Mu (mm-1)		0. 131		0. 131
F000		1760.0		1760. 0
F000'		1761. 36		
h, k, lmax		13, 24, 25		13, 24, 25
Nref		8688[4829]		8688
Tmin, Tmax		0. 974, 0. 983		0. 630, 0. 746
Tmin'		0. 972		
Correction SCAN	method= # Rep	orted T Limits:	Tmin=0.630 Tmax=0.746 Ab	osCorr = MULTI-
Data completeness= 1.80/1.00		Theta(max) = 25.499		
R(reflections) = 0.0538(4547)		wR2(reflections)= 0.1251(8688)		
S = 0.985	S = 0.985 Npar			

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
```

```
PLAT213 ALERT 2 C Atom C51
                             has ADP max/min Ratio .....
                                                    3.2 prolat
PLAT220 ALERT 2 C Large Non-Solvent C
                                                          5.9 Ratio
                                  Ueg(max)/Ueg(min) Range
PLAT222_ALERT_3_C Large Non-Solvent H
                                  Uiso(max)/Uiso(min) ...
                                                       6.5 Ratio
                                                      C18 Check
Ueq as Compared to Neighbors for .....
PLAT241_ALERT_2_C High
                                                       C23 Check
PLAT242 ALERT 2 C Low
                      Ueg as Compared to Neighbors for .....
                                                       Si1 Check
```

And 2 other PLAT242 Alerts

More ...

```
PLAT331_ALERT_2_C Small Average Phenyl C-C Dist. C21 -C26
                                                                1.36 Ang.
PLAT334_ALERT_2_C Small Average Benzene C-C Dist. C14 -C19
                                                                 1.37 Ang.
PLAT340_ALERT_3_C Low Bond Precision on C-C Bonds .....
                                                             0.0093 Ang.
PLAT905_ALERT_3_C Negative K value in the Analysis of Variance ... -0.149 Report
```

Alert level G

```
PLAT003_ALERT_2_G Number of Uiso or Uij Restrained non-H Atoms ...
                                                                      2 Report
                                                                    0.600 Check
PLAT300_ALERT_4_G Atom Site Occupancy of >C50 is Constrained at
And 7 other PLAT300 Alerts
More ...
PLAT301_ALERT_3_G Main Residue Disorder ...... Percentage =
                                                                   2 Note
                                                                   35 Check
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
        N3 -SI1 -MG1 1.555 1.555 1.555
                                                   31.23 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                   48 Check
        N3 -SI2 -MG1 1.555 1.555 1.555
                                                   35.12 Deg.
                                                                   70 Check
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
        O1 -C1 -MG1 1.555 1.555 1.555
                                                   34.30 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                  109 Check
                         1.555 1.555 1.555
        N2 -C10 -MG1
                                                   42.70 Deg.
                                                                    S Verify
PLAT791_ALERT_4_G The Model has Chirality at C11
                                                  (Chiral SPGR)
PLAT791 ALERT 4 G The Model has Chirality at C12 (Chiral SPGR)
                                                                    R Verify
PLAT850_ALERT_4_G Check Flack Parameter Exact Value 0.00 and su ..
                                                                     0.11 Check
PLAT860_ALERT_3_G Number of Least-Squares Restraints ......
                                                                  6 Note
```

0 ALERT level A = Most likely a serious problem - resolve or explain
 0 ALERT level B = A potentially serious problem, consider carefully
 12 ALERT level C = Check. Ensure it is not caused by an omission or oversight
 18 ALERT level G = General information/check it is not something unexpected

0 ALERT type 1 CIF construction/syntax error, inconsistent or missing data 10 ALERT type 2 Indicator that the structure model may be wrong or deficient 5 ALERT type 3 Indicator that the structure quality may be low 15 ALERT type 4 Improvement, methodology, query or suggestion 0 ALERT type 5 Informative message, check

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Publication of your CIF in other journals

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PLATON version of 21/06/2015; check.def file version of 21/06/2015

Datablock mo_dm15804_0m - ellipsoid plot



checkCIF/PLATON (standard)

You have not supplied any structure factors. As a result the full set of tests cannot be run.

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No syntax errors found. Please wait while processing CIF dictionary Interpreting this report

Datablock: mo_dm15237_0m

```
C-C = 0.0115 A
                                                                     Wavelength=0.71073
Bond precision:
Cell:
             a=22.132(5)
                                   b=11, 214(3)
                                                          c=19,876(5)
                                   beta=98.636(4)
             alpha=90
                                                          gamma=90
Temperature: 130 K
                          Calculated
                                                                      Reported
                                                                      4877(2)
Volume
                           4877(2)
Space group
                          C 2
                                                                      C 1 2 1
                          C 2y
Hall group
                                                                      C 2v
Moiety formula
                          2(C50 H57 Mg N3 O2 Si2), C7 H8
                                                                      C50 H57 Mg N3 O2 Si2, C3.5 H4
                          C107 H122 Mg2 N6 O4 Si4
                                                                      C53.50 H61 Mg N3 O2 Si2
Sum formula
Mr
                          1717.09
                                                                      858, 54
                                                                      1 169
Dx, g cm-3
                          1.169
                          2
7
                                                                      4
Mu (mm-1)
                          0.128
                                                                      0.128
F000
                          1836.0
                                                                      1836.0
F000
                          1837, 39
                          31, 15, 28
                                                                      31, 15, 28
h, k, lmax
                                                                      12718
Nref
                          14754[ 7723]
Tmin, Tmax
                          0.977, 0.994
                                                                      0.597, 0.746
Tmin'
                          0.969
Correction method= # Reported T Limits: Tmin=0.597 Tmax=0.746 AbsCorr = MULTI-
Data completeness= 1.65/0.86
                                            Theta(max) = 30.412
R(reflections) = 0.0751(4605)
                                                wR2(reflections) = 0.1824(12718)
S = 0.907
                              Npar= 564
```

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 B

PLAT026 ALERT 3 B Ratio Observed / Unique Reflections too Low 36 % PLAT340_ALERT_3_B Low Bond Precision on C-C Bonds 0.0115 Ang.

Alert level C

RINTA01_ALERT_3_C The value of Rint is greater than 0.12 Rint given 0.164

0.164 Report PLAT020_ALERT_3_C The value of Rint is greater than 0.12 PLAT244_ALERT_4_C Low 'Solvent' Ueq as Compared to Neighbors of C54 Check PLAT601_ALERT_2_C Structure Contains Solvent Accessible VOIDS of . 41 Ang3

Alert level G

 ${\tt PLAT042_ALERT_1_G~Calc.~and~Reported~MoietyFormula~Strings~Differ}$ Please Check PLAT045_ALERT_1_G Calculated and Reported Z Differ by 0.50 Ratio PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF # 1 Check N3 -SI1 -MG1 1.555 1.555 1.555 35.40 Deg.

And 3 other PLAT779 Alerts

PLAT789 ALERT 4 G Atoms with Negative atom site disorder group # 3 Check PLAT791 ALERT 4 G The Model has Chirality at C11 (Chiral SPGR) R Verify

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

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

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

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

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

1 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

7 ALERT type 4 Improvement, methodology, query or suggestion 0 ALERT type 5 Informative message, check

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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 29/01/2015; check.def file version of 29/01/2015

Datablock mo_dm15237_0m - ellipsoid plot



checkCIF (basic structural check) running

Checking for embedded fcf data in CIF ...

Found embedded fcf data in CIF. Extracting fcf data from uploaded CIF, please wait

checkCIF/PLATON (basic structural check)

Structure factors have been supplied for datablock(s) dm16274

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.

No syntax errors found. Please wait while processing CIF dictionary

Interpreting this report

858, 54

Structure factor report

Datablock: dm16274

Bond precision: C-C = 0.0056 AWavelength=0.71073 Cell: a=22. 162(3) b=11. 2330 (13) c=19.873(3)beta=98.551(5) gamma=90 alpha=90 Temperature: 130 K Calculated Reported

Volume 4892.3(11) 4892. 2(12) Space group C_2 $C \ 1 \ 2 \ 1$ Hall group C 2y C 2v 2(C50 H57 Mg N3 O2 Si2), C7 H8 C50 H57 Mg N3 O2 Si2, C3.5 H4 Moiety formula

Sum formula C107 H122 Mg2 N6 O4 Si4 C53.50 H61 Mg N3 O2 Si2

Dx, g cm-3 1.166 1.166 7. 2 4 Mu (mm-1)0.128 0.128 F000 1836.0 1836.0 F000' 1837.39 31, 15, 28 h. k. lmax 31, 15, 28

11794 Nref 14767[7729] Tmin, Tmax 0.985, 0.994 0.661, 0.746

0.981

Correction method= # Reported T Limits: Tmin=0.661 Tmax=0.746 AbsCorr = MULTI-

Mr

Data completeness= 1.53/0.80 Theta(max) = 30.386

1717.09

R(reflections) = 0.0497(6590) wR2(reflections) = 0.1039(11794)

S = 0.941Npar= 564

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

PLAT244 ALERT 4 C Low 'Solvent' Ueg as Compared to Neighbors of C52 Check PLAT340 ALERT 3 C Low Bond Precision on C-C Bonds 0.00557 Ang. PLAT601_ALERT_2_C Structure Contains Solvent Accessible VOIDS of . 39 Ang3 PLAT905_ALERT_3_C Negative K value in the Analysis of Variance ... -1.014 Report PLAT915_ALERT_3_C No Flack x Check Done: Low Friedel Pair Coverage 59 % PLAT978_ALERT_2_C Number C-C Bonds with Positive Residual Density 0 Note

Alert level G

Please Check PLAT042_ALERT_1_G Calc. and Reported MoietyFormula Strings Differ PLAT045_ALERT_1_G Calculated and Reported Z Differ by a Factor ... 0.50 Check PLAT300_ALERT_4_G Atom Site Occupancy of *H51A is Constrained at 0.5 Check

And 2 other PLAT300 Alerts

More ...

```
PLAT380_ALERT_4_G Incorrectly? Oriented X(sp2)-Methyl Moiety .....
                                                                   C25 Check
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                    1 Check
        N3 -SI1 -MG1 1.555 1.555 1.555
                                                   35.52 Dea.
                                                                   11 Check
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
        N3 -SI2 -MG1 1.555 1.555 1.555
                                                   33.47 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                   63 Check
        O1 -C1 -MG1 1.555 1.555 1.555
                                                   36.09 Deg.
PLAT779_ALERT_4_G Suspect or Irrelevant (Bond) Angle in CIF .... #
                                                                   122 Check
        N1 -C16 -MG1
                        1.555 1.555 1.555
                                                    43.22 Deg.
PLAT789_ALERT_4_G Atoms with Negative _atom_site_disorder_group #
                                                                         3 Check
                                                                    S Verify
PLAT791_ALERT_4_G The Model has Chirality at C18
                                                  (Chiral SPGR)
PLAT910_ALERT_3_G Missing # of FCF Reflection(s) Below Theta(Min)
                                                                     1 Note
PLAT912_ALERT_4_G Missing # of FCF Reflections Above STh/L= 0.600
                                                                      64 Note
```

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

- 2 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
- 4 ALERT type 3 Indicator that the structure quality may be low
- 12 ALERT type 4 Improvement, methodology, query or suggestion
- 0 ALERT type 5 Informative message, check

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PLATON version of 06/05/2016; check.def file version of 05/05/2016 Datablock dm16274 - ellipsoid plot

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

⁶ ALERT level C = Check. Ensure it is not caused by an omission or oversight

¹⁴ ALERT level G = General information/check it is not something unexpected