

checkCIF/PLATON report

No syntax errors found. CIF dictionary Interpreting this report

Datablock: 41026am

Bond precision: C-C = 0.0031 Å

Wavelength=0.71073

Cell: a=5.0633(2) b=7.8476(3) c=28.8648(9)
 alpha=92.227(2) beta=93.436(2) gamma=102.045(2)
Temperature: 273 K

	Calculated	Reported
Volume	1118.12(7)	1118.12(7)
Space group	P -1	P-1
Hall group	-P 1	?
Moiety formula	C21 H38 N O, Cl, O	?
Sum formula	C21 H38 Cl N O2	C21 H38 Cl N O
Mr	371.97	355.97
Dx,g cm-3	1.105	1.057
Z	2	2
Mu (mm-1)	0.184	0.178
F000	408.0	392.0
F000'	408.44	
h,k,lmax	6,10,38	6,10,37
Nref	5436	5404
Tmin,Tmax	0.982,0.984	0.717,0.916
Tmin'	0.982	

Correction method= NONE

Data completeness= 0.994

Theta(max)= 28.040

R(reflections)= 0.0564(3348)

wR2(reflections)= 0.1997(5404)

S = 1.071

Npar= 229

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 A

PLAT306_ALERT_2_A Isolated Oxygen Atom (H-atoms Missing ?)

O2



Alert level C

ABSTY03_ALERT_1_C The _exptl_absorpt_correction_type has been given as none.

However values have been given for Tmin and Tmax. Remove

these if an absorption correction has not been applied.
From the CIF: _exptl_absorpt_correction_T_min 0.717
From the CIF: _exptl_absorpt_correction_T_max 0.916
CHEMW03_ALERT_2_C The ratio of given/expected molecular weight as
calculated from the _atom_site* data lies outside
the range 0.99 <> 1.01
From the CIF: _cell_formula_units_Z 2
From the CIF: _chemical_formula_weight 355.97
TEST: Calculate formula weight from _atom_site*
atom mass num sum
C 12.01 21.00 252.23
H 1.01 38.00 38.30
N 14.01 1.00 14.01
O 16.00 2.00 32.00
Cl 35.45 1.00 35.45
Calculated formula weight 371.99
CRYSC01_ALERT_1_C No recognised colour has been given for crystal colour.
PLAT431_ALERT_2_C Short Inter HL..A Contact Cl1 .. O2 .. 3.15 Ang.
PLAT041_ALERT_1_C Calc. and Reported SumFormula Strings Differ ?
PLAT043_ALERT_1_C Check Reported Molecular Weight 355.97
PLAT068_ALERT_1_C Reported F000 Differs from Calcd (or Missing)... ?

Alert level G

FORMU01_ALERT_2_G There is a discrepancy between the atom counts in the
_chemical_formula_sum and the formula from the _atom_site* data.
Atom count from _chemical_formula_sum: C21 H38 Cl1 N1 O1
Atom count from the _atom_site data: C21 H38 Cl1 N1 O2
CELLZ01_ALERT_1_G Difference between formula and atom_site contents detected.
CELLZ01_ALERT_1_G ALERT: Large difference may be due to a
symmetry error - see SYMMG tests
From the CIF: _cell_formula_units_Z 2
From the CIF: _chemical_formula_sum C21 H38 Cl N O
TEST: Compare cell contents of formula and atom_site data

atom Z*formula cif sites diff
C 42.00 42.00 0.00
H 76.00 76.00 0.00
Cl 2.00 2.00 0.00
N 2.00 2.00 0.00
O 2.00 4.00 -2.00
PLAT072_ALERT_2_G SHELXL First Parameter in WGHT Unusually Large. 0.12
PLAT154_ALERT_1_G The su's on the Cell Angles are Equal (x 10000) 200 Deg.
PLAT199_ALERT_1_G Check the Reported _cell_measurement_temperature 273 K
PLAT200_ALERT_1_G Check the Reported _diffrn_ambient_temperature 273 K

- 1 **ALERT level A** = In general: serious problem
- 0 **ALERT level B** = Potentially serious problem
- 7 **ALERT level C** = Check and explain
- 7 **ALERT level G** = General alerts; check

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

