

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) ma34

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](#)

[Structure factor report](#)

Datablock: ma34

Bond precision:	C-C = 0.0142 A	Wavelength=0.71073
Cell:	a=14.266(4) b=16.785(4) c=9.785(3)	
	alpha=90 beta=97.40(2) gamma=90	
Temperature:	173 K	
	Calculated	Reported
Volume	2323.6(11)	2323.6(11)
Space group	P 21/c	P 21/c
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C25 H24 N2 O4	C25 H24 N2 O4
Sum formula	C25 H24 N2 O4	C25 H24 N2 O4
Mr	416.46	416.46
Dx, g cm ⁻³	1.191	1.191
Z	4	4
Mu (mm ⁻¹)	0.081	0.081
F000	880.0	880.0
F000'	880.41	
h,k,lmax	16,19,11	16,19,11
Nref	4105	4096
Tmin,Tmax	0.998,0.999	0.511,1.000
Tmin'	0.990	
Correction method=	# Reported T Limits: Tmin=0.511 Tmax=1.000	
AbsCorr =	MULTI-SCAN	
Data completeness=	0.998 Theta(max)= 25.025	
R(reflections)=	0.0904(997) wR2(reflections)= 0.1816(4096)	
S =	0.811 Npar= 281	

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

RINTA01_ALERT_3_A The value of Rint is greater than 0.25
Rint given 0.258

Author Response: The crystal was a weakly diffracting extremely thin needle.

PLAT020_ALERT_3_A The Value of Rint is Greater Than 0.12 0.258 Report

Author Response: The crystal was a weakly diffracting extremely thin needle.

PLAT026_ALERT_3_A Ratio Observed / Unique Reflections (too) Low .. 24% Check

Author Response: The crystal was a weakly diffracting extremely thin needle.

Alert level B

PLAT340_ALERT_3_B Low Bond Precision on C-C Bonds 0.01417 Ang.

Alert level C

PLAT220_ALERT_2_C NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range 3.2 Ratio
 PLAT234_ALERT_4_C Large Hirshfeld Difference C21 --C26 . 0.16 Ang.
 PLAT241_ALERT_2_C High 'MainMol' Ueq as Compared to Neighbors of C13 Check
 PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of C11 Check
 PLAT242_ALERT_2_C Low 'MainMol' Ueq as Compared to Neighbors of C14 Check
 PLAT906_ALERT_3_C Large K Value in the Analysis of Variance 117.169 Check

And 6 other PLAT906 Alerts

More ...

PLAT910_ALERT_3_C Missing # of FCF Reflection(s) Below Theta(Min). 9 Note

Alert level G

PLAT007_ALERT_5_G Number of Unrefined Donor-H Atoms 2 Report
 PLAT793_ALERT_4_G Model has Chirality at C2 (Centro SPGR) R Verify
 PLAT793_ALERT_4_G Model has Chirality at C3 (Centro SPGR) R Verify
 PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary . Please Do !
 PLAT908_ALERT_2_G Max. Perc. Data with I > 2*s(I) per Res.Shell . 55.34% Note
 PLAT963_ALERT_2_G Both SHELXL WEIGHT Parameter Values Zero Please Check
 PLAT978_ALERT_2_G Number C-C Bonds with Positive Residual Density. 0 Info

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

- 1 ALERT type 1 CIF construction/syntax error, inconsistent or missing data
 7 ALERT type 2 Indicator that the structure model may be wrong or deficient
 12 ALERT type 3 Indicator that the structure quality may be low
 3 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 structural 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

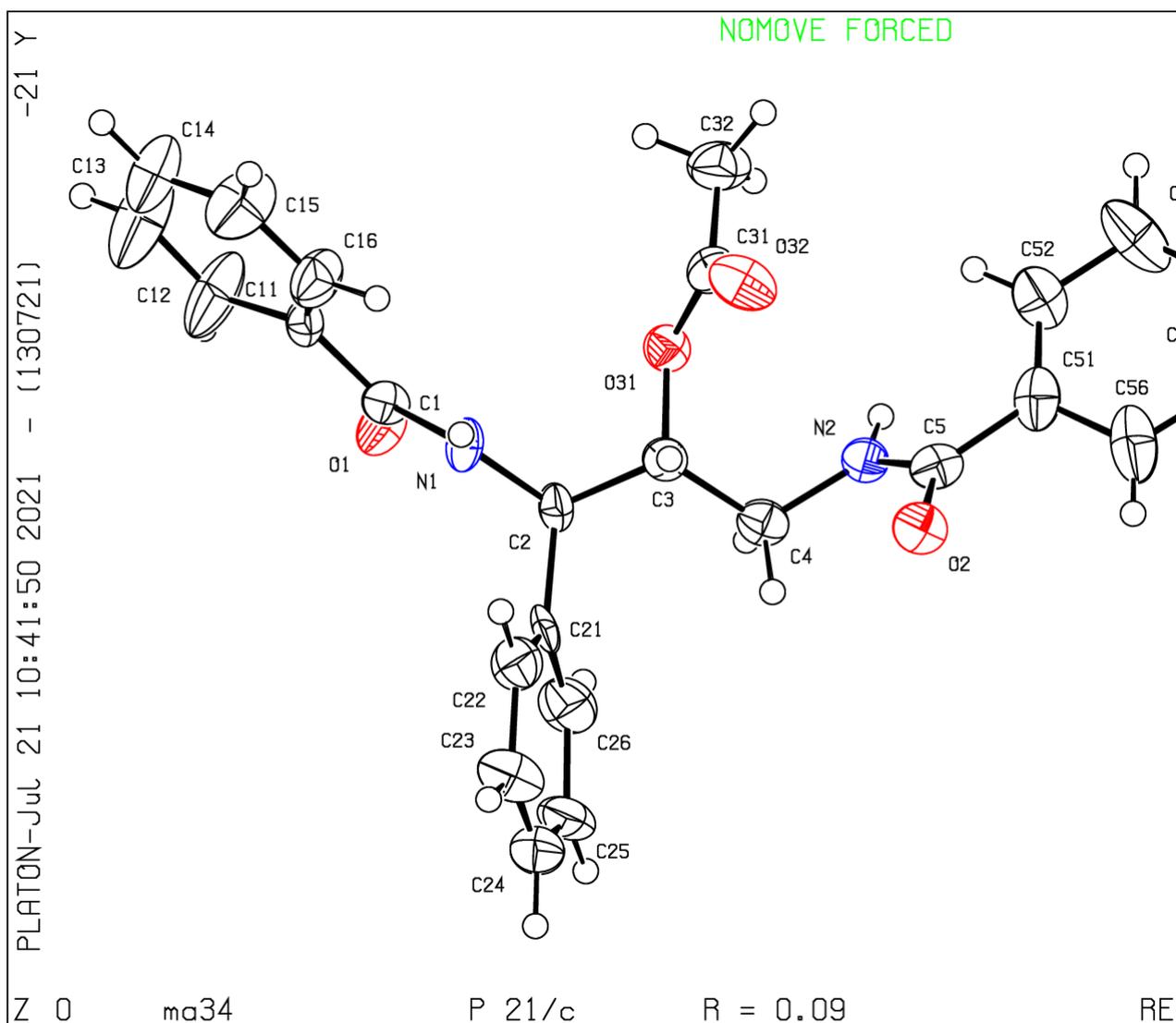
A basic structural check has been run on your CIF. These basic checks will be run on all CIFs submitted for publication in IUCr journals (*Acta Crystallographica*, *Journal of Applied Crystallography*, *Journal of Synchrotron Radiation*); however, if you intend to submit to *Acta Crystallographica Section 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 13/07/2021; check.def file version of 13/07/2021

Datablock ma34 - ellipsoid plot



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