

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) dv368s

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 Interpreting this report

Datablock: dv368s

Bond precision:	C-C = 0.0029 A	Wavelength=0.71073
Cell:	a=16.6623(13)	b=10.6686(8) c=12.8916(11)
	alpha=90	beta=110.232(2) gamma=90
Temperature:	103 K	
	Calculated	Reported
Volume	2150.3(3)	2150.3(3)
Space group	P 21/c	P 1 21/c 1
Hall group	-P 2ybc	-P 2ybc
Moiety formula	C16 H32 N2 P, F6 P	?
Sum formula	C16 H32 F6 N2 P2	C16 H32 F6 N2 P2
Mr	428.38	428.37
Dx,g cm-3	1.323	1.323
Z	4	4
Mu (mm-1)	0.255	0.255
F000	904.0	904.0
F000'	905.37	
h,k,lmax	23,15,18	23,15,18
Nref	6615	6591
Tmin,Tmax	0.898,0.905	0.770,0.910
Tmin'	0.898	

Correction method= # Reported T Limits: Tmin=0.770 Tmax=0.910
AbsCorr = MULTI-SCAN

Data completeness= 0.996 Theta(max)= 30.590

R(reflections)= 0.0464(4516) wR2(reflections)= 0.1116(6591)

S = 1.020 Npar= 245

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' Ueq as Compared to Neighbors of	P2 Check
PLAT905_ALERT_3_C	Negative K value	in the Analysis of Variance ...	-0.103 Report



Alert level G

PLAT007_ALERT_5_G	Number of Unrefined Donor-H Atoms	1 Report
PLAT883_ALERT_1_G	No Info/Value for _atom_sites_solution_primary .	Please Do !
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	25 Note
PLAT978_ALERT_2_G	Number C-C Bonds with Positive Residual Density.	7 Info

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

1 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
 2 ALERT type 3 Indicator that the structure quality may be low
 2 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.

