

## checkCIF/PLATON report

Structure factors have been supplied for datablock(s) SAIOC-1@G14

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: SAIOC-1@G14

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Bond precision:	C-C = 0.0146 Å	Wavelength=1.34050	
Cell:	a=30.0170 (3) alpha=90	b=30.0170 (3) beta=90	c=19.5023 (4) gamma=90
Temperature:	100 K		
	Calculated	Reported	
Volume	17572.0 (5)	17572.0 (5)	
Space group	P 4/n	P 4/n	
Hall group	-P 4a	-P 4a	
Moiety formula	C216 H364 Al32 N12 O110 Pb6 S12, 2(C8 H10 N), 2(C5 H4 N) [+ sol	C216 H364 Al32 N12 O110 Pb6 S12, 0.5(C52 H56 N8)	
Sum formula	C242 H392 Al32 N16 O110 Pb6 S12 [+ solvent]	C242 H392 Al32 N16 O110 Pb6 S12	
Mr	7777.02	7776.91	
Dx, g cm <sup>-3</sup>	1.470	1.470	
Z	2	2	
Mu (mm <sup>-1</sup> )	5.059	5.201	
F000	7872.0	7872.0	
F000'	7851.44		
h, k, lmax	38, 38, 25	38, 31, 25	
Nref	19898	19373	
Tmin, Tmax	0.563, 0.771	0.248, 1.000	
Tmin'	0.337		

Correction method= # Reported T Limits: Tmin=0.248 Tmax=1.000  
AbsCorr = MULTI-SCAN

Data completeness= 0.974

Theta(max)= 60.036

R(reflections)= 0.0701( 13018)

wR2(reflections)=  
0.2239( 19373)

S = 1.047

Npar= 977

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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

PLAT973\_ALERT\_2\_A Check Calcd Positive Resid. Density on Pb1 2.32 eA-3

**Author Response:** These alerts are generated because of residual density peaks near the heaviest atoms in the structure, due to fourier termination ripples. After inspection, the residual electron density peak does not make chemical sense and will not affect the correct identification of the structure.

PLAT973\_ALERT\_2\_A Check Calcd Positive Resid. Density on Pb2 2.07 eA-3

**Author Response:** These alerts are generated because of residual density peaks near the heaviest atoms in the structure, due to fourier termination ripples. After inspection, the residual electron density peak does not make chemical sense and will not affect the correct identification of the structure.



#### Alert level B

PLAT242\_ALERT\_2\_B Low 'MainMol' Ueq as Compared to Neighbors of N3 Check

**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.



#### Alert level C

RADNW01\_ALERT\_1\_C The radiation wavelength lies outside the expected range  
for the supplied radiation type. Expected range 1.34130-1.34150  
Wavelength given = 1.34050

PLAT094_ALERT_2_C	Ratio of Maximum / Minimum Residual Density ....	3.17	Report
PLAT220_ALERT_2_C	NonSolvent Resd 1 C Ueq(max)/Ueq(min) Range	3.9	Ratio
PLAT220_ALERT_2_C	NonSolvent Resd 1 O Ueq(max)/Ueq(min) Range	5.4	Ratio
PLAT222_ALERT_3_C	NonSolvent Resd 1 H Uiso(max)/Uiso(min) Range	5.6	Ratio
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	024	Check
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C19	Check
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C25	Check
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C38	Check
PLAT241_ALERT_2_C	High 'MainMol' Ueq as Compared to Neighbors of	C39	Check

PLAT241_ALERT_2_C	High	'MainMol'	Ueq as Compared to Neighbors of	C48	Check
PLAT241_ALERT_2_C	High	'MainMol'	Ueq as Compared to Neighbors of	C57	Check
PLAT241_ALERT_2_C	High	'MainMol'	Ueq as Compared to Neighbors of	C59	Check
PLAT241_ALERT_2_C	High	'MainMol'	Ueq as Compared to Neighbors of	C62	Check
PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	N2	Check

**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	C31	Check
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**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	C34	Check
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**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	C43	Check
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**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	C49	Check
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**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242_ALERT_2_C	Low	'MainMol'	Ueq as Compared to Neighbors of	C51	Check
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**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of C56 Check

**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of C66 Check

**Author Response:** These alerts are generated because there is a large amount of disorder in the structure. Some refined commands such as DELU, SIMU and ISOR were used to address such abnormal Ueq value, but failed. After inspection, this does not affect the correct assignment of atom types.

PLAT260\_ALERT\_2\_C Large Average Ueq of Residue Including Pb1 0.125 Check  
PLAT260\_ALERT\_2\_C Large Average Ueq of Residue Including N5 0.150 Check  
PLAT260\_ALERT\_2\_C Large Average Ueq of Residue Including N4 0.150 Check  
PLAT329\_ALERT\_4\_C Carbon Atom Hybridisation Unclear for ..... C6 Check  
PLAT342\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.0146 Ang.  
PLAT411\_ALERT\_2\_C Short Inter H...H Contact H18B ..H63A . 2.10 Ang.  
1-x,2-y,1-z = 5\_676 Check  
PLAT906\_ALERT\_3\_C Large K Value in the Analysis of Variance ..... 2.918 Check  
PLAT911\_ALERT\_3\_C Missing FCF Refl Between Thmin & STh/L= 0.600 73 Report  
1 3 0, 0 4 0, -3 5 0, 1 5 0, 0 6 0, 2 6 0,  
8 8 0, 5 9 0, 6 10 0, -21 29 0, -19 29 0, -17 29 0,  
1 1 1, -2 3 1, -1 3 1, -2 4 1, -4 5 1, -2 5 1,  
0 5 1, -3 7 1, 2 9 1, -8 10 1, 3 10 1, 2 11 1,  
-21 29 1, -20 29 1, 0 0 2, 0 3 2, 1 3 2, -2 4 2,  
3 4 2, 4 5 2, 6 6 2, -4 7 2, 1 9 2, -9 10 2,  
5 10 2, -6 12 2, 0 12 2, 0 2 3, 1 3 3, 1 5 3,  
2 6 3, -1 7 3, 7 12 3, -3 4 4, -2 5 4, 2 5 4,  
-1 6 4, 2 6 4, -2 12 4, 2 14 4, -1 4 5, 3 4 5,  
-3 6 5, 5 9 5, -5 8 6, 1 8 6, 1 9 6, -4 16 6,  
0 0 7, 3 3 7, 3 7 7, 0 8 7, 5 13 7, 4 4 9,  
-1 12 9, 0 0 14, 15 21 14, 15 22 14, 14 24 14, 14 25 14,  
1 17 18,  
PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 0.73Ang From Pb2 2.19 eA-3  
PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 0.59Ang From Pb1 1.97 eA-3  
PLAT971\_ALERT\_2\_C Check Calcd Resid. Dens. 1.01Ang From Pb2 1.56 eA-3  
PLAT975\_ALERT\_2\_C Check Calcd Resid. Dens. 1.03Ang From O5 . 0.70 eA-3  
PLAT977\_ALERT\_2\_C Check Negative Difference Density on H17C . -0.31 eA-3



### Alert level G

ABSMU01\_ALERT\_1\_G Calculation of \_exptl\_absorpt\_correction\_mu  
not performed for this radiation type.

PLAT002\_ALERT\_2\_G Number of Distance or Angle Restraints on AtSite 28 Note  
PLAT003\_ALERT\_2\_G Number of Uiso or U(i,j) Restrained non-H Atoms 45 Report  
PLAT007\_ALERT\_5\_G Number of Unrefined Donor-H Atoms ..... 2 Report  
H12 H27

PLAT042\_ALERT\_1\_G Calc. and Reported MoietyFormula Strings Differ Please Check  
Calc: C216 H364 Al32 N12 O110 Pb6 S12, 2(C8 H10 N), 2(C5 H4 N)  
Rep.: C216 H364 Al32 N12 O110 Pb6 S12, 0.5(C52 H56 N)

8)

PLAT051_ALERT_1_G	Mu(calc) and Mu(CIF) Ratio Differs from 1.0 by .	2.73 %
PLAT072_ALERT_2_G	SHELXL First Parameter in WGHT Unusually Large	0.14 Report
PLAT172_ALERT_4_G	The CIF-Embedded .res File Contains DFIX Records	23 Report
PLAT177_ALERT_4_G	The CIF-Embedded .res File Contains DELU Records	5 Report
PLAT178_ALERT_4_G	The CIF-Embedded .res File Contains SIMU Records	5 Report
PLAT186_ALERT_4_G	The CIF-Embedded .res File Contains ISOR Records	4 Report
PLAT188_ALERT_3_G	A Non-default SIMU Restraint Value has been used	0.0100 Report
PLAT188_ALERT_3_G	A Non-default SIMU Restraint Value has been used	0.0100 Report
PLAT188_ALERT_3_G	A Non-default SIMU Restraint Value has been used	0.0100 Report
PLAT188_ALERT_3_G	A Non-default SIMU Restraint Value has been used	0.0100 Report
PLAT188_ALERT_3_G	A Non-default SIMU Restraint Value has been used	0.0100 Report
PLAT192_ALERT_3_G	A Non-default DELU Restraint Value for SecondPar	0.0200 Report
PLAT192_ALERT_3_G	A Non-default DELU Restraint Value for SecondPar	0.0200 Report
PLAT192_ALERT_3_G	A Non-default DELU Restraint Value for SecondPar	0.0200 Report
PLAT192_ALERT_3_G	A Non-default DELU Restraint Value for SecondPar	0.0200 Report
PLAT192_ALERT_3_G	A Non-default DELU Restraint Value for SecondPar	0.0200 Report
PLAT299_ALERT_4_G	Atom Site Occupancy Constrained at .....	0.5 Check
	C41 C42 H40A H40B H40C H40D H41A H41B	
	H41C H42A H42B H42C N5 C6 C7 C8	
	C9 C10 C11 C12 C13 H6A H6B H7A	
	H7B H8A H8B H9 H10 H12A H13 N4	
	C1 C2 C3 C4 C5 H1 H2 H4	
	H5	
PLAT301_ALERT_3_G	Main Residue Disorder .....(Resd 1)	1% Note
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 2)	100% Note
PLAT302_ALERT_4_G	Anion/Solvent/Minor-Residue Disorder (Resd 3)	100% Note
PLAT304_ALERT_4_G	Non-Integer Number of Atoms in ..... (Resd 2)	9.50 Check
PLAT411_ALERT_2_G	Short Inter H...H Contact H7B ..H62A .	2.08 Ang.
	1-x,2-y,1-z =	5_676 Check
PLAT411_ALERT_2_G	Short Inter H...H Contact H1 ..H57 .	2.11 Ang.
	x,y,z =	1_555 Check
PLAT411_ALERT_2_G	Short Inter H...H Contact H1 ..H47 .	2.14 Ang.
	y,3/2-x,z =	4_565 Check
PLAT412_ALERT_2_G	Short Intra XH3 .. XHn H37B ..H41A .	1.99 Ang.
	x,y,z =	1_555 Check
PLAT412_ALERT_2_G	Short Intra XH3 .. XHn H39B ..H42B .	2.12 Ang.
	x,y,z =	1_555 Check
PLAT413_ALERT_2_G	Short Inter XH3 .. XHn H42C ..H61B .	2.10 Ang.
	-1+y,3/2-x,z =	4_465 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C2 ..C6 .	2.53 Ang.
	2-y,1/2+x,1-z =	8_766 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C3 ..C6 .	1.48 Ang.
	2-y,1/2+x,1-z =	8_766 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C3 ..C7 .	2.69 Ang.
	2-y,1/2+x,1-z =	8_766 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C3 ..C8 .	3.10 Ang.
	2-y,1/2+x,1-z =	8_766 Check
PLAT432_ALERT_2_G	Short Inter X...Y Contact C4 ..C6 .	2.42 Ang.
	2-y,1/2+x,1-z =	8_766 Check
PLAT605_ALERT_4_G	Largest Solvent Accessible VOID in the Structure	109 A**3
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...	0.00 Deg.
	O10 -O10 -PB1 3_655 1_555 1_555 ..... #	185 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...	0.00 Deg.
	O10 -O10 -PB1 4_565 1_555 1_555 ..... #	186 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant (Bond) Angle(s) in CIF ...	0.00 Deg.
	O10 -O10 -PB1 2_665 1_555 1_555 ..... #	187 Check

PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	2_665	1_555 4_565 .....	# 188 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	2_665	1_555 2_665 .....	# 189 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	3_655	1_555 2_665 .....	# 190 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	4_565	1_555 1_555 .....	# 191 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	4_565	1_555 3_655 .....	# 192 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	3_655	1_555 4_565 .....	# 193 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	3_655	1_555 1_555 .....	# 194 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	2_665	1_555 3_655 .....	# 195 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	2_665	1_555 1_555 .....	# 196 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	4_565	1_555 2_665 .....	# 197 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	4_565	1_555 4_565 .....	# 198 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -AL2	3_655	1_555 3_655 .....	# 199 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -O10	4_565	1_555 3_655 .....	# 200 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -O10	3_655	1_555 2_665 .....	# 201 Check
PLAT779_ALERT_4_G	Suspect or Irrelevant	(Bond) Angle(s) in CIF ...	0.00 Deg.
O10 -O10 -O10	4_565	1_555 2_665 .....	# 202 Check
PLAT794_ALERT_5_G	Tentative Bond Valency for Pb1	(II) .	1.97 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Pb3	(II) .	2.10 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al2	(III) .	2.76 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al3	(III) .	2.76 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al4	(III) .	2.80 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al5	(III) .	2.78 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al6	(III) .	2.75 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al7	(III) .	2.79 Info
PLAT794_ALERT_5_G	Tentative Bond Valency for Al8	(III) .	2.84 Info
PLAT860_ALERT_3_G	Number of Least-Squares Restraints	.....	436 Note
PLAT868_ALERT_4_G	ALERTS Due to the Use of _smtbx_masks	Suppressed	! Info
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).		2 Note
	1 1 0, 0 0 1,		
PLAT912_ALERT_4_G	Missing # of FCF Reflections Above STh/L=	0.600	446 Note
PLAT913_ALERT_3_G	Missing # of Very Strong Reflections in FCF ....		1 Note
	1 1 0,		
PLAT933_ALERT_2_G	Number of HKL-OMIT Records in Embedded .res File		65 Note
	-23 26 9, 18 19 17, 0 2 3, 0 4 0, 1 1 1,	2 6 3,	
	1 8 6, -1 3 1, 1 3 2, 0 5 1, -2 12 4,	4 4 9,	
	-9 25 18, -3 7 1, 0 12 2, 5 9 5, 7 12 3,	2 5 4,	
	-3 4 4, 2 14 4, 1 9 2, -2 4 2, 2 11 1,	-4 7 2,	
	3 3 7, 15 25 14, 3 4 2, -1 4 5, 3 7 7,	0 3 2,	
	-4 5 1, 1 5 3, -5 26 18, 2 9 1, 5 13 7,	-2 5 1,	
	2 6 0, -9 10 2, -1 6 4, -2 5 4, 1 3 3,	-3 5 0,	
	-6 12 2, 1 9 6, 4 5 2, -3 6 5, 6 6 2,	-5 8 6,	
	0 8 7, -8 10 1,		

PLAT941_ALERT_3_G	Average HKL Measurement Multiplicity .....	3.0	Low
PLAT951_ALERT_5_G	Calculated (ThMax) and CIF-Reported Kmax Differ	7	Units
PLAT969_ALERT_5_G	The 'Henn et al.' R-Factor-gap value .....	3.728	Note
	Predicted wR2: Based on SigI**2 6.01 or SHELX Weight	21.38	
PLAT978_ALERT_2_G	Number C-C Bonds with Positive Residual Density.	1	Info
PLAT984_ALERT_1_G	The C-f' = 0.0147 Deviates from the B&C-Value	0.0137	Check
PLAT984_ALERT_1_G	The N-f' = 0.0253 Deviates from the B&C-Value	0.0241	Check
PLAT984_ALERT_1_G	The O-f' = 0.0412 Deviates from the B&C-Value	0.0389	Check
PLAT984_ALERT_1_G	The Pb-f' = -4.2646 Deviates from the B&C-Value	-4.4950	Check
PLAT985_ALERT_1_G	The Al-f" = 0.1843 Deviates from the B&C-Value	0.1873	Check
PLAT985_ALERT_1_G	The Pb-f" = 7.1982 Deviates from the B&C-Value	6.8412	Check
PLAT985_ALERT_1_G	The S-f" = 0.4242 Deviates from the B&C-Value	0.4295	Check

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- 2 **ALERT level A** = Most likely a serious problem - resolve or explain  
1 **ALERT level B** = A potentially serious problem, consider carefully  
35 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
83 **ALERT level G** = General information/check it is not something unexpected
- 12 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
48 ALERT type 2 Indicator that the structure model may be wrong or deficient  
19 ALERT type 3 Indicator that the structure quality may be low  
30 ALERT type 4 Improvement, methodology, query or suggestion  
12 ALERT type 5 Informative message, check
- 

## checkCIF publication errors

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### Alert level A

PUBL004\_ALERT\_1\_A The contact author's name and address are missing,  
    \_publ\_contact\_author\_name and \_publ\_contact\_author\_address.  
PUBL005\_ALERT\_1\_A \_publ\_contact\_author\_email, \_publ\_contact\_author\_fax and  
    \_publ\_contact\_author\_phone are all missing.  
    At least one of these should be present.  
PUBL006\_ALERT\_1\_A \_publ\_requested\_journal is missing  
    e.g. 'Acta Crystallographica Section C'  
PUBL008\_ALERT\_1\_A \_publ\_section\_title is missing. Title of paper.  
PUBL009\_ALERT\_1\_A \_publ\_author\_name is missing. List of author(s) name(s).  
PUBL010\_ALERT\_1\_A \_publ\_author\_address is missing. Author(s) address(es).  
PUBL012\_ALERT\_1\_A \_publ\_section\_abstract is missing.  
    Abstract of paper in English.

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- 7 **ALERT level A** = Data missing that is essential or data in wrong format  
0 **ALERT level G** = General alerts. Data that may be required is missing
-

## Publication of your CIF

You should 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 nature of your study may justify the reported deviations from journal submission requirements and the more serious of these should 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.

If level A alerts remain, which you believe to be justified deviations, and you intend to submit this CIF for publication in a journal, you should additionally insert an explanation in your CIF using the Validation Reply Form (VRF) below. This will allow your explanation to be considered as part of the review process.

## Validation response form

Please find below a validation response form (VRF) that can be filled in and pasted into your CIF.

```
# start Validation Reply Form
_vrf_PUBL004_GLOBAL
;
PROBLEM: The contact author's name and address are missing,
RESPONSE: ...
;
_vrf_PUBL005_GLOBAL
;
PROBLEM: _publ_contact_author_email, _publ_contact_author_fax and
RESPONSE: ...
;
_vrf_PUBL006_GLOBAL
;
PROBLEM: _publ_requested_journal is missing
RESPONSE: ...
;
_vrf_PUBL008_GLOBAL
;
PROBLEM: _publ_section_title is missing. Title of paper.
RESPONSE: ...
;
_vrf_PUBL009_GLOBAL
;
PROBLEM: _publ_author_name is missing. List of author(s) name(s).
RESPONSE: ...
;
_vrf_PUBL010_GLOBAL
;
PROBLEM: _publ_author_address is missing. Author(s) address(es).
```

```

RESPONSE: ...
;
_vrf_PUBL012_GLOBAL
;
PROBLEM: _publ_section_abstract is missing.
RESPONSE: ...
;
# end Validation Reply Form

```

If you wish to submit your CIF for publication in Acta Crystallographica Section C or E, you should upload your CIF via the web. If you wish to submit your CIF for publication in IUCrData you should upload your CIF via the web. If your CIF is to form part of a submission to another IUCr journal, you will be asked, either during electronic submission or by the Co-editor handling your paper, to upload your CIF via our web site.

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**PLATON version of 15/07/2024; check.def file version of 15/07/2024**

Datablock SAIOC-1@G14 - ellipsoid plot

