checkCIF/PLATON report

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

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.

Datablock: ic19779

Bond precision:	C-C = 0.0022 A	ī	Wavelength=0.71073		
Cell:	a=15.3322(4) alpha=90	b=16.579 beta=90		c=45.5861(12) gamma=90	
Temperature:	150 K				
	Calculated		Reported	l	
Volume	11587.7(5)		11587.6((5)	
Space group	Fddd		Fddd		
	-F 2uv 2vw		-F 2uv 2	2vw	
Moiety formula	C18 H16 Co N2 O6 H4 N S)	5 S2, 2(C5	?		
Sum formula	C28 H24 Co N4 O6	5 S4	C28 H24	Co N4 O6 S4	
Mr	699.68		699.68		
Dx,g cm-3	1.604		1.604		
Z	16		16		
Mu (mm-1)	0.932		0.932		
F000	5744.0		5744.0		
F000′	5759.54				
h,k,lmax	21,23,64		21,23,64	Į	
Nref	4232		4231		
Tmin,Tmax	0.784,0.890		0.645,0.746		
Tmin'	0.764				
Correction method= # Reported T Limits: Tmin=0.645 Tmax=0.746 AbsCorr = MULTI-SCAN					
Data completeness= 1.000		Theta(m	Theta(max) = 29.998		
R(reflections) = 0.0283(3756) wR2(reflections) = 0.0728(4231)					
S = 1.028	Npar= 203				

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.

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Alert level C

PLAT250_ALERT_2_C Large U3/U1 Ratio for Average U(i,j) Tensor .... 2.8 Note

Alert level G

PLAT004_ALERT_5_G Polymeric Structure Found with Maximum Dimension 2 Info

PLAT083_ALERT_2_G SHELXL Second Parameter in WGHT Unusually Large 36.18 Why ?

PLAT794_ALERT_5_G Tentative Bond Valency for Co1 (II) . 1.92 Info

PLAT883_ALERT_1_G No Info/Value for _atom_sites_solution_primary . Please Do !

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

O ALERT level B = A potentially serious problem, consider carefully
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1 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

1 ALERT level C = Check. Ensure it is not caused by an omission or oversight 4 ALERT level G = General information/check it is not something unexpected

 $\ensuremath{\text{0}}$ ALERT type $\ensuremath{\text{3}}$ Indicator that the structure quality may be low

0 ALERT type 4 Improvement, methodology, query or suggestion

2 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.

PLATON version of 22/04/2020; check.def file version of 09/03/2020

Datablock ic19779 - ellipsoid plot

