

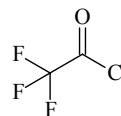
166  
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 $\text{C}_2\text{ClF}_3\text{O}$ 

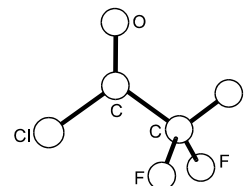
Trifluoroacetyl chloride

 $\text{C}_s$  assumed

$r_a$	$\text{\AA}^a$	$\theta_a$	$\text{deg}^a$
C=O	1.186(4)	C-C=O	126.2(8)
C-C	1.533(6)	C-C-Cl	110.9(5)
C-F	1.329(2)	Cl-C=O	123.1(7)
C-Cl	1.742(4)	F-C-F	108.7(2)



The  $\text{CF}_3$  group is staggered with respect to the C-Cl bond. Local  $\text{C}_{3v}$  symmetry was assumed for this group. The experimental parameters were reproduced by HF/3-21G\* and HF/6-31G\* calculations. The nozzle was at room temperature.



<sup>a</sup>) Three times the estimated standard errors.

Gobbato, K.I., Leibold, C., Centeno, S., Della Védova, C.O., Mack, H.-G., Oberhammer, H.: J. Mol. Struct. **380** (1996) 55.