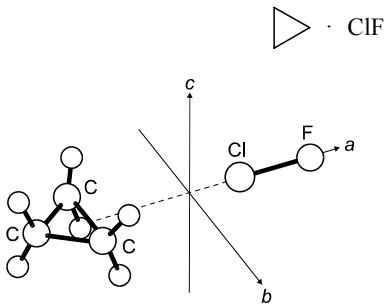
392 **C_3H_6ClF** **Cyclopropane – chlorine fluoride (1/1)** **C_{2v}**
MW (weakly bound complex) (effective symmetry class)
(large-amplitude motion)

r_0	Å [a])	
	$(CH_2)_3 \cdot {}^{35}ClF$	$(CH_2)_3 \cdot {}^{37}ClF$
R_{cm}	3.9697(10)	3.9488(10)
M...Cl [b])	2.9578(10)	2.9575(10)
k_σ [N m^{-1}] [c])	9.91	9.74



The distance from the cyclopropane centre of mass to the Cl nucleus was also reported to be 3.395(1) Å. A detailed interpretation of the observed molecular constants leads to the conclusion that the three C nuclei, the Cl nucleus and the F nucleus are coplanar and that in the equilibrium conformation the axis of ClF coincides or nearly coincides with the *a*-axis of the complex, with Cl closer than F to the cyclopropane ring. It is most likely that the *a*-axis coincides with a median of the C_3 equilateral triangle.

[a]) Uncertainties were not all estimated in the original paper.
[b]) M indicates the midpoint of the C–C internuclear line.
[c]) Intermolecular stretching force constant.

Hinds, K., Holloway, J.H., Legon, A.C.: J. Chem. Soc., Faraday Trans. **93** (1997) 373.