

1307
MW

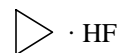
C₃H₇F

Cyclopropane – hydrogen fluoride (1/1)
(weakly bound complex)

C_{2v}
(effective symmetry class)
(large-amplitude motion of HF)

r_0	Å ^{a)}
$r^b)$	3.021(3)
$r^c)$	3.458(3)
$R_{cm}^d)$	3.411(3)

θ_0	deg ^{a)}
$\gamma^e)$	19(3)



HF lies on the C₂ symmetry axis of the complex, perpendicular to the cyclopropane edge, and in the plane of the ring.

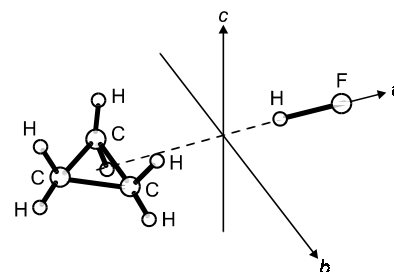
^{a)} Uncertainties were not estimated in the original paper.

^{b)} Edge to F.

^{c)} Centroid to F.

^{d)} Separation of centers of mass in the ground vibrational state.

^{e)} Instantaneous angle between the H–F bond direction and the *a* axis. Average angle.



Buxton, L.W., Aldrich, P.D., Shea, J.A., Legon, A.C., Flygare, W.H.: J. Chem. Phys. **75** (1981) 2681.