

1206
MW

C₃H₅F

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

C_s
(large-amplitude motion
of the H atom in HF)
(effective symmetry class)
H₃C–C≡CH · HF
H₃C–C≡CH · DF

Isotopic species	$r_0(R_F)$ [Å]	β_0 [deg]	γ_0 [deg] ^{a)}	γ_0 [deg] ^{b)}
H ₃ C–C≡CH · HF	3.07(1)	81(1)		
H ₃ C–C≡CH · DF	3.06(1)	82(1)	34(6)	37(1)

^{a)} Determined from spin-spin coupling constant.

^{b)} Determined from nuclear quadrupole
coupling constant.

Shea, J.A., Bumgarner, R.E., Henderson, G.: J. Chem.
Phys. **80** (1984) 4605.

