200 **$C_2H_2Br^-$** **Ethyne – bromide (1/1)** **$C_{\infty v}$**
IR (weakly bound complex) (effective symmetry class)
(large-amplitude motion)
$HC{\equiv}CH \cdot Br^-$

State	R_{cm} [Å] [a])	r(H...Br) [Å] [a])
υ=0	4.11(3)	2.45(5)
υ_3=1	4.07(3)	2.41(5)

The structure was determined from the rotationally resolved IR predissociation spectrum of the C–H fundamentals. The geometry of the ethyne subunit was assumed to be unchanged upon complexation.

[a]) Uncertainties were not given in the original paper.

Wild, D.A., Milley, P.J., Loh, Z.M., Wolynec, P.P., Weiser, P.S., Bieske, E.J.: J. Chem. Phys. **113** (2000) 1075.