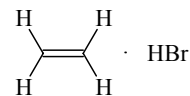


279 MW	C₂H₅Br	Ethene – hydrogen bromide (1/1) (weakly bound complex)	C_{2v} (effective symmetry class) (large-amplitude motion)
r_0	Å	θ_0	deg
R_{cm}	3.900(4) ^{a)}	β_{av} ^{c)}	21.015(1)
*...Br ^{b)}	3.916(4)		

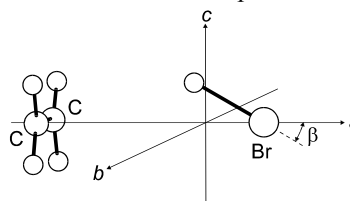


In the complex, the HBr subunit forms a weak hydrogen bond to the center of the π -bond of ethene and lies along the C_2 axis of ethene that is perpendicular to the nuclear plane. The intermolecular stretching force constant is 5.19 N m^{-1} .

^{a)} Uncertainty was not estimated in the original paper.

^{b)} * denotes the center of the π bond.

^{c)} Average value. See figure for the definition.



Fowler, P.W., Legon, A.C., Thumwood, J.M.A., Wacławik, E.R.: *Coord. Chem. Rev.* **197** (2000) 231.