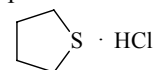


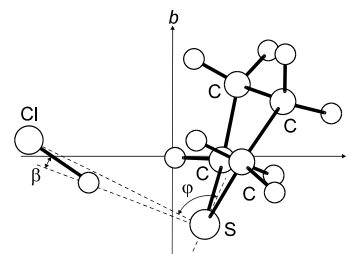
578
MW $\text{C}_4\text{H}_9\text{ClS}$ **Tetrahydrothiophene – hydrogen chloride (1/1)**

(weakly bound complex)

 C_s (effective symmetry class)
(large-amplitude motion)

r_0	Å	θ_0	deg
S...Cl	3.48(3)	$\beta^{\text{a)}}$	14 ^{b)}
		$\varphi^{\text{c)}}$	86.6(7)

The rotational constants and quadrupole coupling constants have been interpreted in terms of a geometry in which hydrogen chloride lies on the plane bisector to the C–S–C angle of tetrahydrothiophene.



^{a)} Angle by which the S...H–Cl deviates from a collinear arrangement, see figure.

^{b)} Estimated.

^{c)} Angle between the S...Cl internuclear line and the line bisecting the C–S–C angle, see figure.

Sanz, M.E., López, J.C., Alonso, J.L.: J. Phys. Chem. A **102** (1998) 3681.