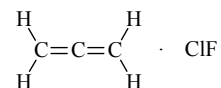


366  
MW**C<sub>3</sub>H<sub>4</sub>ClF****Allene – chlorine fluoride (1/1)****C<sub>s</sub>**1,2-Propadiene – chlorine fluoride (1/1) (effective symmetry class)  
(weakly bound complex) (large-amplitude motion)

$r_0$	Å
M...Cl <sup>a)</sup>	2.774(6)

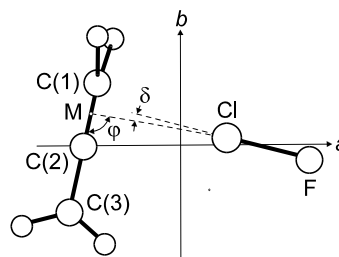
$\theta_0$	deg
$\varphi$ <sup>b)</sup>	92.5(7)
$\delta$ <sup>b)</sup>	4.9(15)



The intermolecular stretching force constant is determined to be 8.79 N m<sup>-1</sup>. The complex is of the weakly bound, Mulliken outer type in which the Cl of ClF interacts with the  $\pi$ -bond of allene.

<sup>a)</sup> M is the mid-point of the C(1)=C(2) bond.

<sup>b)</sup> See figure for the definition.



Cooke, S.A., Holloway, J.H., Legon, A.C.: Chem. Phys. Lett. **266** (1997) 61.