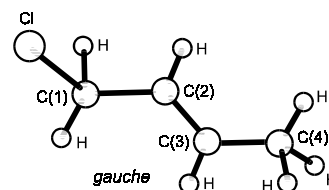
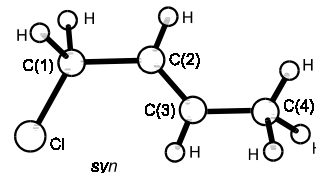


r_a	\AA^a	θ_α	deg^a
C=C	1.342(10)	C=C-C (average) ^c	125.3(10)
C-C (average) ^b	1.496(6)	C-C-Cl	110.3(5)
C-Cl	1.807(6)	C=C-H	120.0 ^d
C-H (average)	1.111(9)	C-C-H (average)	122.7(32)
		τ (<i>gauche</i>) ^e	118(4)

The molecule exists as a mixture of *gauche* (89(11)%) and *syn* (11%) conformers. Local C_{3v} symmetry for the $\text{C}-\text{CH}_3$ and local C_s symmetry for the $\text{C}-\text{CH}_2\text{Cl}$ group were assumed. The atoms $\text{C}(1)-\text{CH}=\text{CH}-\text{C}(4)\text{H}$ were assumed to be coplanar. The nozzle temperature was 20 °C.



^a) Twice the estimated standard errors including a systematic error.

^b) $[\text{C}(1)-\text{C}(2)] - [\text{C}(3)-\text{C}(4)] = 0.004 \text{ \AA}$ assumed.

^c) $[\text{C}(2)=\text{C}(3)-\text{C}(4)] - [\text{C}(3)=\text{C}(2)-\text{C}(1)] = 0.4^\circ$ assumed.

^d) Assumed.

^e) Torsional angle $\text{Cl}-\text{C}(1)-\text{C}(2)=\text{C}(3)$ for the *gauche* conformer, $\tau = 0^\circ$ for the *syn* conformer.

Stavnebrekk, P.J., Schei, S.H., Stølevik, R.: J. Mol. Struct. **156** (1987) 97.