

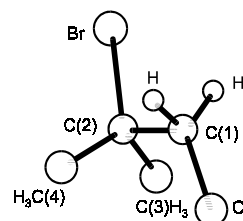
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C₄H₈BrCl

2-Bromo-1-chloro-2-methylpropane

C₁ (*gauche*)
essentially **C_s** (skeleton) (*anti*)
H₂ClC–CBr(CH₃)₂

r_g	Å ^{a)}	θ_α	deg ^{a)}
C–H	1.088(7)	C(2)–C(1)–Cl	115.5(14)
C–C (average)	1.532(3)	C(1)–C(2)–Br	106.4(4)
C–Cl	1.798(5)	C(2)–C(1)–H	109.5 ^{b)}
C–Br	1.989(8)	C(4)–C(2)–C(3) ^{c)}	113.4(12)
		τ (<i>gauche</i>) ^{d)}	54(4)
		τ (<i>anti</i>) ^{d)}	159(3)



anti

The molecule exists as a mixture of the *gauche* (35(7)%) and *anti* (65(7)%) conformers. The projection of HC(1)Cl angle on the plane perpendicular to the C(1)–C(2) bond was assumed to be 120°.

The measurements were made at room temperature.

^{a)} Unidentified, possibly three times the estimated standard errors.

^{b)} Assumed.

^{c)} The C(1)–C(2)–C(3) and C(1)–C(2)–C(4) angles were not reported in the original paper.

^{d)} Torsional angle Br–C(2)–C(1)–Cl, $\tau = 0^\circ$ for the *syn* position.

Shen, Q.: J. Mol. Struct. **112** (1984) 169.