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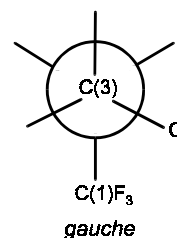
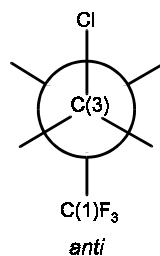
C₃H₄ClF₃

3-Chloro-1,1,1-trifluoropropane

C_s (*anti*)
C₁ (*gauche*)
F₃C–CH₂–CH₂Cl

r_a	\AA^a
C–F	1.349(3)
C–Cl	1.787(9)
C–C	1.519(6)
C–H	1.09(2)

θ_α	deg ^{a)}
C–C–C	112(3)
C–C–Cl	111(1)
C–C(3)–H	117(4)
C(1)–C–H	111(6)
H–C(3)–H	103(5)
F–C–C	111(2)
τ^b	118(20)



The molecule exists as a mixture of *anti* (92(4)%) and *gauche* (8(4)%) conformers;
 $\Delta E = E(\textit{gauche}) - E(\textit{anti})$ is 1.9(4) kcal mol^{–1}, in agreement with spectroscopic data,
 $\Delta E = 2.05(25)$ kcal mol^{–1}.

The nozzle was at room temperature.

^{a)} Three times the estimated standard errors.

^{b)} Dihedral angle C–C–C–Cl of the *gauche* conformer; $\tau = 0^\circ$ for *anti* conformer.

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 Stølevik, R.: Zh. Strukt. Khim **28** No.2 (1987) 174; Russ. J. Struct. Chem. (Engl. Transl.)
28 (1987) 314.