

1148
MW

C₃H₄F₂

***cis*-1,2-Difluorocyclopropane**

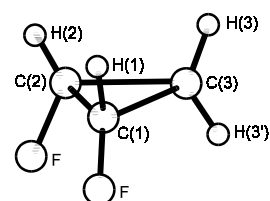
C_s

r_0	Å	θ_0	deg
C(1,2)–C(3)	1.500(5)	H–C(1,2)–F	111.3(5)
C(1)–C(2)	1.493(6)	H–C(3)–H	111.4(4)
C(1)–F	1.368(8)	F–C(1)–C(2)	116.8(5)
C(1)–H	1.090(5)	F–C(1,2)–C(3)	116.9(5)
C(3)–H(3) ^{a)}	1.07(4)	H–C(1)–C(2)	121.3(3)
C(3)–H(3') ^{a)}	0.96(42)	H–C(1)–C(3)	121.9(6)



r_s	Å	θ_s	deg
C(1,2)–C(3)	1.503(4)	H–C(1,2)–F	111.3(4)
C(1)–C(2)	1.488(3)	H–C(3)–H	109.0(10)
C(1)–F	1.368(6)	F–C(1)–C(2)	117.0(3)
C(1)–H	1.093(4)	F–C(1,2)–C(3)	116.7(5)
C(3)–H(3) ^{a)}	1.075(30)	H–C(1)–C(2)	121.5(3)
C(3)–H(3') ^{a)}	0.91(12)	H–C(1)–C(3)	121.6(4)

Atom	a_0 [Å]	b_0 [Å]	c_0 [Å]
C(1,2)	±0.7465	–0.3338	–0.4339
C(3)	0.00	–1.2634	0.4761
F(1,2)	±1.3638	0.7384	0.1486
H(1,2)	±1.3120	–0.6979	–1.2923
H(3)	0.00	–2.15	0.10
H(3')	0.00	–1.303	1.545



Atom	a_s [Å]	b_s [Å]	c_s [Å]
C(1,2)	±0.7438	–0.3292	–0.4362
C(3)	0.00	–1.2633	0.4760
F(1,2)	±1.3645	0.7385	0.1522
H(1,2)	±1.3148	–0.7012	–1.2913
H(3)	0.00	–2.05	0.0169
H(3')	0.00	–1.47	1.531

^{a)} The H(3) and H(3') atoms attached to C(3) are *cis* to the H and F atoms attached to C(1) and C(2), respectively.

Justnes, H., Zozom, J., Gillies, C.W., Sengupta, S.K., Craig, N.C.: J. Am. Chem. Soc. **108** (1986) 881.