

1098
MW

C₃H₃FO

Acryloyl fluoride
2-Propenoyl fluoride

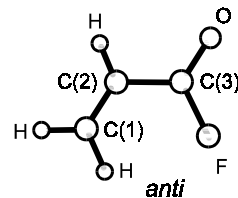
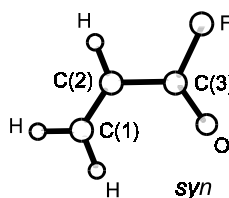
C_s (*syn*)
C_s (*anti*)
H₂C=CH-C(O)F

<i>r</i> ₀	Å		<i>θ</i> ₀	deg	
	<i>anti</i>	<i>syn</i>		<i>anti</i>	<i>syn</i>
C–H ^{a)}	1.085 ^{b)}	1.085 ^{b)}	H–C(1)–H	118.5 ^{b)}	118.5 ^{b)}
C(2)–C(3)	1.49(3)	1.48(3)	C(2)=C(1)–H	117.4 ^{b)}	117.4 ^{b)}
C(1)=C(2)	1.35(2)	1.35(2)	C(1)=C(2)–H	120.0 ^{b)}	120.0 ^{b)}
C(3)–F	1.35(2)	1.35(2)	C(1)=C(2)–C(3)	121.8(30)	119.9(30)
C(3)=O	1.18(2)	1.18(2)	O=C(3)–F	121.7(20)	121.7(20)
			C(2)–C(3)–F	111.3(20)	110.1(20)

The molecule is planar.

^{a)} All C–H distances are assumed to be equal.

^{b)} Assumed.



Keirns, J.J., Curl, R.F.: J. Chem. Phys. **48** (1968) 3773.