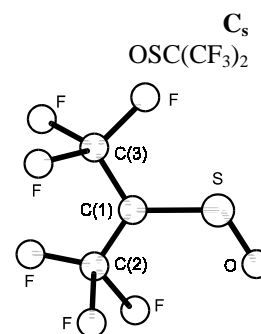


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C₃F₆OS

Hexafluoropropanethione S-oxide

r_a	Å ^{a)}	θ_a	deg ^{a)}
S=O	1.455(5)	C(1)=S=O	111.3(20)
S=C	1.634(7)	C(2)–C(1)–C(3)	120.7(6)
C–C ^{b)}	1.511(8)	S=C(1)–C(2)	123.7(11)
C–F ^{c)}	1.329(3)	S=C(1)–C(3)	115.5(11)
		F–C–F ^{c)}	107.9(3)
		tilt (CF ₃)	0.0 ^{d)}



The CF₃ group *trans* to oxygen is eclipsed with respect to the C=S bond, whereas the CF₃ group *cis* to oxygen is staggered with respect to the C=S bond, the small deviations from the exact eclipsed or staggered position being less than 15°. The measurements were made at room temperature.

^{a)} Three times the estimated standard errors including the experimental scale error.

^{b)} C(1)–C(2) and C(1)–C(3) were assumed to be equal.

^{c)} The CF₃ groups were assumed to have equal structures and local C_{3v} symmetry.

^{d)} Assumed.

Liedle, S., Oberhammer, H., Fritz, H., Sundermeyer, W.: J. Mol. Struct. **216** (1990) 171.