

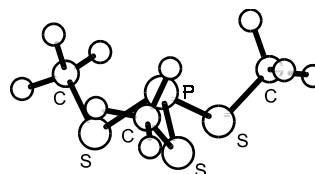
1028
ED

C₃F₉PS₃

Tris(trifluoromethyl) phosphorotrithioite
Tris(trifluoromethylthio)phosphine

C₃ (all-*syn*)
P(SCF₃)₃

r_a	Å ^{a)}	θ_a	deg ^{b)}
P–S	2.128(6)	S–P–S	96.1(11)
S–C	1.817(5)	P–S–C	98.4 (15)
C–F	1.331(2)	F–C–F	108.2(3)
		$\phi_1 = \phi_2 = \phi_3$ ^{c)}	29(4)



According to the ED data the prevailing conformer has C₃ symmetry (all-*syn*). The presence of the C_s and/or C₁ structures (up to 20%) could not be excluded. Local C_{3v} symmetry was assumed for the CF₃ groups.

The nozzle was at room temperature.

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

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

^{c)} Dihedral angle lp–P–S–C, where lp is the lone pair at P atom; $\phi = 0^\circ$ for the *syn* position.

Korn, M., Oberhammer, H., Minkwitz, R.: J. Mol. Struct. **300** (1993) 61.