

1001
ED

C₃Cl₂F₉P

Dichlorotris(trifluoromethyl)phosphorane

essentially C_s
Cl₂P(CF₃)₃

r_a	Å ^{a)}	θ_a	deg ^{a)}
C–F	1.329(2)	F–C–F	108.5(3)
P–C(average)	1.943(5)	Cl–P–Cl	133.0(17)
P–C(eq)	1.938(31)	C(ax)–P–C(eq)	95.5(19)
P–C(ax)	1.946(14)	δ ^{b)}	7.9(35)
P–Cl	2.053(6)		

The fluorine atoms of the axial CF₃ groups are staggered relative to the equatorial atoms.
The nozzle temperature was 15 °C.

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

^{b)} Torsional angle of the equatorial CF₃ group defined as zero when one F atom lies on the equatorial plane.

Oberhammer, H., Grobe, J.: Z. Naturforsch. **30b** (1975) 506.

