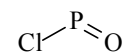


139
MW

CIOP

Phosphoryl chloride
Phosphenous chloride**C_s**

r_0	Å	θ_0	deg
P=O	1.4620(105)	O=P-Cl	110.04(43)
P-Cl	2.0586(44)		
$r_{\Delta I/\Delta P}^a$	Å	$\theta_{\Delta I/\Delta P}^a$	deg
P=O	1.4604(28)	O=P-Cl	110.00(17)
P-Cl	2.0576(8)		
r_s	Å	θ_s	deg
P=O	1.4609(5)	O=P-Cl	109.98(3)
P-Cl	2.0576(1)		

^a) Derived by using the isotopic differences in the moments of inertia (ΔI) or the planar moments of inertia (ΔP), whereas the r_s is obtained from the change in moments of inertia upon isotopic substitution, combined with the first- and second-moment conditions, if necessary.

Brupbacher-Gatehouse, B., Brupbacher, T.: J. Chem. Phys. **111** (1999) 6300.