

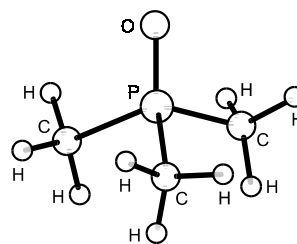
1409
ED

C₃H₉OP

Trimethylphosphine oxide

C₃
O=P(CH₃)₃

r_a	Å ^{a)}	θ_a	deg ^{a)}
P=O	1.476(2)	O=P-C	114.4(7)
P-C	1.809(2)	C-P-C	104.1(8)
C-H	1.107(4)	P-C-H	110.3(8)
		τ^b	44.1(34)



With models simulating free rotation of the methyl groups, approximately the same parameter values were obtained. The nozzle temperature was 150...160 °C.

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

^{b)} The torsional angle H-C-P=O, $\tau = 0^\circ$ for the *syn* position.

Wilkins, C.J., Hagen, K., Hedberg, L., Shen, Q., Hedberg, K.: J. Am. Chem. Soc. **97** (1975) 6352.

See also: Wang, H.K.: Acta Chem. Scand. **19** (1965) 879.