

1411
ED

C₃H₉O₄P

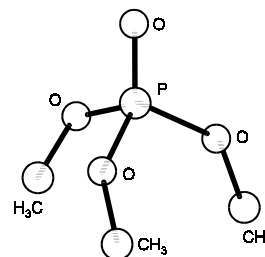
Trimethyl phosphate

C₃ (skeleton) assumed
(conformers I and II)
O=P(OCH₃)₃

$r^a)$	$\text{\AA}^b)$	$\theta^a)$	$\text{deg}^b)$
P=O	1.477(18)	O-P-O	105(9)
P-O	1.580(6)	P-O-C	118(5)
O-C	1.432(15)	$\tau_1^c)$	27(34)
C-H	1.10(1)	$\tau_2^d)$	112(67)

The molecule exists as a mixture of two conformers with essential difference only in the dihedral angle τ . The mole fraction of the conformer with τ_1 (see figure) was found to be 74(42)%.

The nozzle temperature was $\approx 100^\circ\text{C}$.



^{a)} Unidentified, possibly r_a and θ_a .

^{b)} Uncertainty estimates are three times those of the original data.

^{c)} The dihedral angle O=P-O-C from the *anti* position for the more abundant conformer.

^{d)} The dihedral angle O=P-O-C from the *anti* position for the less abundant conformer.

Oberhammer, H.: Z. Naturforsch. **28a** (1973) 1140.