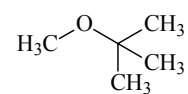


673  
MW**C<sub>5</sub>H<sub>12</sub>O*****t*-Butyl methyl ether**

2-Methoxy-2-methylpropane

**C<sub>s</sub>** (see comment)

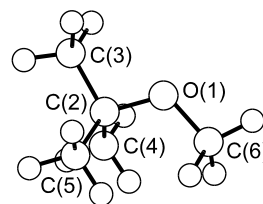
$r_0$	Å <sup>a)</sup>	$\theta_0$	deg <sup>a)</sup>
C(6)–O	1.415 <sup>b)</sup>	C–O–C	118.5(5)
C(2)–C(3)	1.498(4)	C(3)–C(2)–O	106.3(3)
C(2)–C(4,5)	1.567(2)	C(4,5)–C(2)–O	110.9(3)
C(2)–O	1.417 <sup>b)</sup>	C(3)–C(2)–C(4,5)	110.4(2)
		C(4)–C(2)–C(5)	108.0(3)
		$\delta(\text{tilt})$ <sup>c)</sup>	3.0(4)

The symmetry group is  $G_6$  when the CH<sub>3</sub> internal rotation in OCH<sub>3</sub> is taken into account. The bulkiness of the *t*-butyl group causes the COC angle to be 6° to 7° larger than that found in most other ethers.

<sup>a)</sup> Twice the estimated standard errors.

<sup>b)</sup> Assumed.

<sup>c)</sup> Tilt angle is defined as  $(2/3)\{[C(4,5)–C(2)–O] – [C(3)–C(2)–O]\}$ .



Suenram, R.D., Lovas, F.J., Pereyra, W., Fraser, G.T., Walker, A.R.H.: J. Mol. Spectrosc. **181** (1997) 67.

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