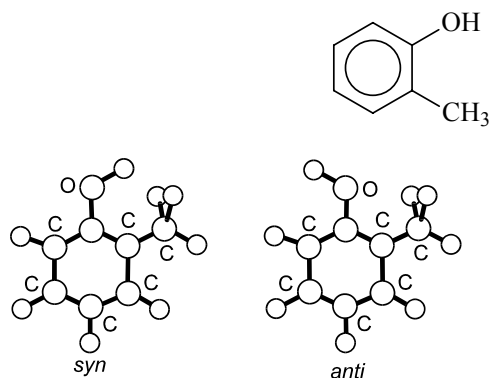


805  
MW $C_7H_8O$ **2-Methylphenol**  
*o*-Cresol**G<sub>6</sub>**

$\theta_0$	deg	
	<i>syn</i>	<i>anti</i>
$\theta(i,a)^a$	33.47(39)	32.489(40)
$\theta(i,b)^a$	56.53(39)	57.511(40)
$\theta(i,c)^a$	90.0 <sup>b)</sup>	90.0 <sup>b)</sup>

Atom	$ a_s $ [Å]	$ b_s $ [Å]
H in hydroxyl group		
<i>syn</i>	2.372	0.921
<i>anti</i>	1.491	2.303



Two conformers were detected: *syn*, in which the hydroxyl group is *syn* with respect to the methyl group and *anti*, in which OH is *anti* to CH<sub>3</sub>. The potential barrier to CH<sub>3</sub> internal rotation is 7.912 and 4.4256 kJ mol<sup>-1</sup> for the *syn* and *anti* conformers, respectively.

<sup>a)</sup> Angles between the methyl group internal rotation axis and the *a*, *b*, and *c* inertial axes.

<sup>b)</sup> Assumed.

Welzel, A., Hellweg, A., Merke, I., Stahl, W.: J. Mol. Spectrosc. **215** (2002) 58.