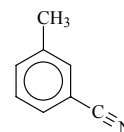


832 MW	$\text{C}_8\text{H}_7\text{N}$	<i>m</i>-Methylbenzonitrile 3-Methylbenzonitrile <i>m</i> -Tolunitrile	G₆
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$$\frac{\theta_0}{\theta^{\text{a)}}} \frac{\text{deg}}{42.657(10)^{\text{b)}}}$$

The threefold barrier to internal rotation $V_3 = 14.2 \text{ cm}^{-1}$, using fixed values for the sixfold barrier term $V_6 (-11 \text{ cm}^{-1})$ and the moment of inertia of the methyl top $I_a (3.16 \text{ u } \text{\AA}^2)$.

^{a)} The angle between the internal rotor axis and the principal a axis.

^{b)} Uncertainty is 100 times larger than the value given in the original paper.

Bruhn, T., Mäder, H.: J. Mol. Spectrosc. **200** (2000) 151.