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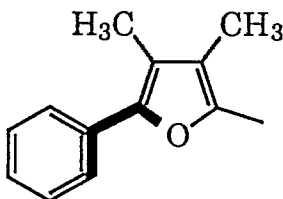
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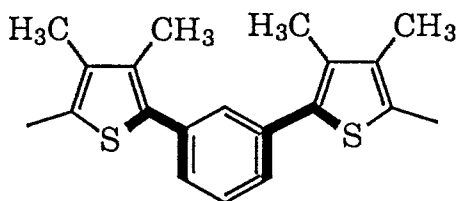
2-Methyl-3,4-dimethyl-5-phenylfuran



$$\psi_{\text{twist}} = 30^\circ$$

$$\text{strain energy} = 20.07 \text{ kcal/mol}$$

1,3-Bis(3',4'-dimethyl-2'-methyl-5'-thienyl)benzene



Lowest energy conformers found had both of the thiophene moieties twisted about 30° away from the plane of the phenyl ring.

$$\text{Conformer 1: } \psi_{\text{twist1}}, \psi_{\text{twist2}} = -149^\circ, 36.2^\circ$$

$$\text{strain energy} = 37.19 \text{ kcal/mol}$$

$$\text{Conformer 2: } \psi_{\text{twist1}}, \psi_{\text{twist2}} = 148^\circ, 36.4^\circ$$

$$\text{strain energy} = 36.7 \text{ kcal/mol}$$

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