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## Conformations of the methyl and aryl esters of the arylsulfonic acids

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### Abstract

1. The substituted methylarylsulfonates and arylarylsulfonates exist as mixtures of trans and gauche conformers, the latter predominating at equilibrium (~70%). 2. The angle of aryl group rotation relative to the Csp<sup>3</sup>-S-O plane is 43° in the methylphenylsulfonates and the methyl-tolylsulfonates and 75° in the methyl-p-bromophenylsulfonates. 3. As a result of electron-acceptor effects from the SO<sub>2</sub> group, the S-O-C plane of the arylsulfonic acids esters are almost perpendicular to the aromatic ring. © 1980 Plenum Publishing Corporation.

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