

Carbon-13 and nitrogen-15 NMR spectral study of some dimethanesulfonanilides.

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Abstract

¹³C and ¹⁵N NMR spectra of 21 o-, m- and p-substituted PhN(SO₂Me)₂ (I) were recorded. The ¹³C chem. shifts were analyzed utilizing substituent chem. shifts for monosubstituted benzenes and by dual-substituent-parameter (DSP) and DSP-nonlinear equations. The -N(SO₂Me)₂ moiety is an extremely weak electron donor. The ¹⁵N chem. shifts of the p-substituted compds. were also analyzed by DSP equations and the results compared with those of related compds. I were prepd. by treating the corresponding PhNH₂ deriv. with MeSO₂Cl in pyridine, followed by NaOH and then addnl. MeSO₂Cl.