REORGANIZATION ENERGIES OF METHYLAMINE RADICALS

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Abstract: To calculate the energy of the reorganization of methylamine radicals, the enthalpy of formation in the gas phase of the corresponding compounds and the enthalpies of formation of amine radicals have been used. The specifics of these compounds lies in the fact that each radical can be investigated through hydrogen derivatives and through methyl derivatives, i. e., to determine the reorganization energies of radicals through independent enthalpies of the formation of composition in the gas phase and to determine the average values. The obtained values made it possible to determine the dissociation energies and the average thermochemical bond energies (C–H and C–N) in methylamines derivatives.

Keywords: formation enthalpies of methylamines; formation enthalpies of radicals; reorganization methylamine radicals; dissociation energies of bonds; average thermochemical energies of bonds

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Table Caption

Average thermochemical bond energies in alkyl hydrocarbons (kJ/mol)

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