

Stabilization energy of the aromatic aminyl radicals

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Abstract

By the dissociation energies of N–H-bonds we calculated stabilization energy of aromatic aminyl radicals of different structure. We have established the rules of additivity for the influence of substituents on the energy of stabilization of mono and bis-substituted diphenylamines and linear correlation between stabilization energies of phenylaminyl and diphenylaminyl radicals. Comparison has been carried out of stabilization for aminyl, benzyl and phenoxyl radicals of similar structure. Linear correlation has been established between stabilization energies of aminyl ($\text{XC}_6\text{H}_4\text{N}^\bullet\text{H}$) and phenoxyl ($\text{XC}_6\text{H}_4\text{O}^\bullet$) radicals. Bibliography – 17 references.