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Theoretical conformational analysis of substituted nitroethenes in solution

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Abstract

Theoretical conformational analysis of 1-nitro- and 1-bromo-1-nitro-2- (trichloromethyl)ethenes dissolved in methylene chloride and benzene was carried out by the B3LYP/6-31G*method. The calculated structures of these compounds were found to nicely fit experiment: Both in the gas phase and in solution, 1-nitro-(2-trichloromethyl)ethene is an E isomer, while its bromine-containing analog is a Z isomer. © 2008 MAIK Nauka.

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