Evaluation of 2,4-di-tert-butylphenol reactivity in the process of sulfonation with elemental sulfur

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Abstract

The 2,4-di-tert-butylphenol reactivity in the process of sulfonation with elemental sulfur was evaluated. It is shown that the process is carried out under alkaline catalysis conditions. The low reactivity of 2,4-di-tert-butylphenol in comparison with 2,6-di-tert-butylphenol can be explained by the peculiarities of its electronic structure. That was confirmed by quantum-chemical calculations.