

## **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.