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The synthesis and antioxidant activity of hydroxybenzylsulfanylacetic acids

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Abstract

2-(3,5-Dialkyl-4(2)-hydroxybenzylsulfanyl)acetic acids were synthesized based on 2,6- and 2,4-dialkylphenols. Rate constants of the interaction of the synthesized compounds with peroxide radicals at the oxidation of methyloleate in an aqueous solution of sodium dodecyl sulfate were measured. It was established that the reaction of these acids with cumyl hydroperoxide was autocatalytic. It was shown that 2-(3,5-dialkyl-4-hydroxybenzylsulfanyl)acetic acids were the effective inhibitors of the autoxidation of methyloleate.