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Promoters for Tocopherols as Antioxidants

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Many kinds of additives are used to prevent the degradation of organic chemicals, including macromolecular materials. Tocopherols are natural products known to be effective antioxidants. Now, on the basis of the anti-oxidation mechanism of tocopherols proposed by us, we have studied amines as promoters, which may enhance the antioxidant activity of a tocopherol, and studied 4-*n*-butoxyphenol, too, as model compounds as tocopherols. It was found that amines exhibit an antagonism to 4-alkylphenols, such as 2,6-di-*t*-butyl-4-methylphenol, whereas they exhibit certain synergism to 4-alkoxyphenols. In addition, it is clarified that an amine having a low ionization potential improves the antioxidant activity of α -tocopherol.

Keywords: [Electron transfer](#), [Antioxidant](#), [Tocopherol](#), [Oxyphenol](#), [Amine](#)

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