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Possibility of the Benzoic Acids Formation by Oxidation of Benzyl Chlorides in the Sand

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ABSTRACT

Seeking the possibility of the formation of benzoic acids from benzyl halides in natural soil, a model oxidation reaction of the halides was carried out in the presence of water and soil in an open air under UV light irradiation. Addition of TiO_2 to soil raised the yield of the acid, implying such a metal oxide plays a real catalytic role in this oxidation. By these supplementary experiments, one of the possibilities for the formation of benzoic acids in natural soil from benzyl chlorides was supported.

KEYWORDS

Oxidation; Benzyl halides; Aromatic Carboxylic Acids

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