Turkish Journal

of

Chemistry

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Turkish Journal of Chemistry

Effects of Ozonation on COD Elimination of Substituted Aromatic Compounds in Aqueus Solution

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Abstract: The chemical oxygen demand (COD) change of various substituted aromatic compounds, namely benzoic acid, p-aminobenzoic acid, p-toluenesulfonic acid, sulfanilic acid, nitro benzene, resorcinol, p-cresol, o- cresol, o-toluidine, aniline and 8-hydroxyquinoline were investigated at ozone doses of 5, 10, 15 and 20 mg O_3\cdotmin^{-1}, respectively.

Percent COD removal of initial compounds after ozonation was compared with reported biodegradation results. The pH change and percent removal of selected compounds were also evaluated in ozone does of 20 mg O \cdotmin^{-1} up to 80 min. ozonation. The