

Heterogeneous Catalytic Ozonation of Diethyl Phthalate

Authors : Chedly Tizaoui, Hussain Mohammed, Lobna Mansouri, Nidal Hilal, Latifa Bousselmi

Abstract : The degradation of diethyl phthalate (DEP) was studied using heterogeneous catalytic ozonation. Activated carbon was used as a catalyst. The degradation of DEP with ozone alone was slow while catalytic ozonation increased degradation rates. Second-order reaction kinetics was used to describe the experimental data, and the corresponding rate constant values were 1.19 and 3.94 M⁻¹.s⁻¹ for ozone and ozone/activated carbon respectively.

Keywords : ozone, heterogeneous catalytic ozonation, diethyl phthalate, endocrine disrupting chemicals

Conference Title : ICWEEM 2017 : International Conference on Water, Energy and Environmental Management

Conference Location : Paris, France

Conference Dates : May 18-19, 2017