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Preparation of Catalyst ZnO-Cd_2O_3 and its Use in Thermal Oxidation of p-xylene in Vapor Phase

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ABSTRACT

Catalyst was prepared from a mixture of ZnO- Cd_2O_3 by using impregnation Method. Different ratios (2:0, 1.5:0.5, 1:1, 0.5:1.5, 0:2) and supported on granulated kaolin clay with different sizes. The thermal vacuum evaporation technique was at 75°C .Characteristics of the catalyst was studied by using X-ray diffraction (XRD) and some of the physical properties such as surface area , porosity, pore size (Mesh No.) and density. Also Studied the activity of prepared catalyst by thermal oxidation for para-xylene at (315˚c).

Keywords: Thermal Oxidation, p-xylene, Catalysts, kaolin clay.