

Characterization of alumina and borated alumina supported catalysts

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Abstract The present study attempts to investigate the surface properties of supported pure aluminum oxide and borated alumina catalysts, using some unconventional techniques. Aluminas have an important role in heterogeneous catalysis, both as catalyst and supports. Alumina is an amphoteric oxide and its acidity increases with the surface modification with supported oxides. Borated alumina, $\text{Al}_{18}\text{B}_4\text{O}_{33}$ is a refractory compound with extraordinary physical properties. Taking into account the important role of the alumina in heterogeneous catalysis, the present study attempts to investigate the surface properties of the borated alumina like supported catalysts.

Keywords: alumina, aluminum borate, supported catalyst
