

KARAKTERISTIK DAN KATALITIK DARI MORDENIT DAN ZSM-5 DALAM REAKSI MENGHASILKAN HIDROKARBON

CHARACTERISTIC AND CATALYTIC FOR MORDENITE AND ZSM-5 REACTION IN PRODUCE HYDROCARBONS

Mustain Zamhari

Staf pengajar Jurusan Teknik Kimia Politeknik Negeri Sriwijaya
Jalan Srijaya Negara Bukit Besar, Palembang 30139
Email: mz_oetara1961@yahoo.com

ABSTRACT

Conversion of methanol to the use of the treated mordenite and ZSM-5 studied in this description. Mordenite catalyst activity which showed a decrease in activity without modified quickly. After hydrothermally dealuminated mordenite done and acidification with HCl, it turns out that longer life of the catalyst thus obtained. Furthermore treated mordenite showed high selectivity to olefin formation. Acidity is measured with predictably by Spectrophotometer Infra Red observations of pyridine adsorbed, also signal of the adsorbed NO. Number of sites was reduced in the presence of acid dealumination treatment. There is no longer detectable acidity found in mordenite which has dealuminated well. Pore volume measured by the adsorption of toluene. The better stability and selectivity of the catalyst in forming various olefins in the use of the treated mordenite discussed here in terms of acidity and shape selectivity.

Key words: modified mordenite, H-ZSM-5, acidity, activity, shape selectivity.