Alkylation of naphthalene for production of 2,6-DAN on modified Large pore Zeolite

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2,6-Naphthalenedicarboxilate(2,6-NDC) is a starting material of poly-ethylenenaphthalate(PEN) resin which is the superior plastic. Currently, only one commercial BP Amoco process has been developed for production of 2,6-NDC. Because of complicate reaction scheme and expensive raw materials, there are many researches about reaction process using naphthalene. From these researches, 2, 6-Diisopropylnaphthalene(DIPN) is the key material to produce 2,6-NDC. Large pore zeolite has been researched to show selective alkylation with their structure. In this research, we have experiment for the screening test with commercial USY, H-M, BEA zeolite. And modified catalysts with dealumination method and metal ion loaded catalysts show some results. With that result, modification which is steamed followed acid treatment was best way in dealumination method. The modification is effected to BrØnsted acidity by dealumination. However shape selectivity is not improved as shown 2, 6-/2, 7-DIPN ratio about 1. Metal ion loaded MOR is improved by hydrogenation of Pt. With proper amount of Pt, there is increasing of stability.