

Dehydrogenation of *n*-butane over SnPt catalysts supported on microporous TiO₂

서대현, 신재순, 조성준†

전남대학교

(sjcho@chonnam.ac.kr†)

Light olefins, such as butenes, C₄=, are important raw materials for the production of rubber, plastics, and other polymers. Catalytic dehydrogenation of butane has been studied extensively because of economic advantage compared to that of thermal craking. In this study, microporous TiO₂ was prepared through the hydrothermal conversion of TiO₂ anatase using LiOH as a peptizing agent. We have investigated the effect of Pt weight percent and Pt/Sn ratio in PtSn catalyst supported on micoporous TiO₂ compared to those of Pt catalyst supported on bulk TiO₂ over butane dehydrogenation. The preliminary results indicated that the obtained SnPt/TiO₂ catalyst showed a comparable activity for butane dehydrogenation.