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Analysis of Operating Variables in the Catalytic Purification of Butene-1 in a Trickle Bed

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摘要 A mathematical model for analyzing and simulating selective hydrogenation of butyne-1 and 1, 3-bu-tadiene in industrial trickle bed reactors operated to obtain high purity butene-1 is presented in this work. From the analysis of typical operating conditions, only the relevant phenomena are finally retained in the model formulation. The model is then employed to analyze the effect of operating variables and catalyst selectivity in process performance. In particular, the search for the minimum hydrogen flow rate necessary to fulfil butene-1 purity specifications is undertaken.

关键词 [selective hydrogenation](#) [butene-1](#) [1,3-butadiene](#) [trickle bed reactor](#)

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Key words [selective hydrogenation](#); [butene-1](#); [1 3-butadiene](#); [trickle bed reactor](#)

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