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催化剂

Pt/KL催化剂的正己烷芳构化反应的研究

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摘要 以正己烷为反应探针分子，考察了Pt/KL催化剂的制备条件如焙烧温度、还原温度及还原时间对催化剂烷烃芳构化性能的影响，发现催化剂经350℃焙烧、500℃下还原2小时后具有较高芳构化活性和选择性；通过分析表征失活催化剂的表面积、孔体积、积炭和Pt晶粒粒度，并与新鲜催化剂相比较，表明积炭堵塞L分子筛微孔和Pt晶粒聚集长大可能是催化剂失活的主要原因。

关键词

分类号

Studies on Pt/KL catalysts for the aromatization of n-hexane

Abstract

The effects of preparing conditions for Pt/KL catalyst such as calcination temperature, reduction temperature and reduction time on the performance of aromatization were investigated by the catalytic tests used n-hexane as probe reaction. It was found that the catalyst calcined at 350℃ and reduced at 500℃ for 2 hours was shown a higher activity and selectivity for n-hexane aromatization. By the comparison of the properties such as the surface area, the pore volume, the carbon deposition and the Pt particle size of the used catalyst with those of the fresh catalyst, it was implied that the coking to produce a channel blockage of L zeolite and the Pt agglomeration possibly result in the deactivation of Pt/KL catalysts for hexane aromatization.

Key words

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