

催化剂

## WO<sub>x</sub>催化剂上正辛烷的临氢异构化反应研究

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**摘要** 以正辛烷为反应物, 在连续流动固定床反应器上考察了还原条件和反应条件对WO<sub>x</sub>催化剂上正辛烷加氢异构化反应性能的影响。通过XRD和BET表征了催化剂的物化性质。结果表明, 在WO<sub>x</sub>催化剂上, 当还原温度为550℃、反应温度为300℃时, 正辛烷异构化反应的转化率达到55.1%, 同时异构化选择性达到83.64%。表征结果表明, 催化剂的活性相为WO<sub>2</sub>和W<sub>3</sub>O, 催化剂具有介孔结构。

**关键词** [正辛烷](#) [异构化催化剂](#) [操作条件](#)

分类号

## RESEARCH OF n-OCTANE HYDROISOMERIZATION OVER WO<sub>x</sub> CATALYST

### Abstract

Hydroisomerization of n-octane over WO<sub>x</sub> catalyst was investigated in a fixed bed reactor, and the effects of reduction and reaction conditions on the catalytic activity were discussed. The physicochemical properties of the prepared catalysts were measured by XRD and BET techniques. Results showed that WO<sub>2</sub> and W<sub>3</sub>O were the active phase of WO<sub>x</sub> catalyst for n-octane hydroisomerization, and mesoporous structure existed in the catalyst. When the reduction temperature was 550℃ and the reaction temperature was 300℃, the conversion of n-octane over WO<sub>x</sub> catalyst reached 55.1% and the selectivity of isomerization was 83.64%.

**Key words** [n-octane](#) [isomerization catalyst](#) [operating condition](#)

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