Ti接枝KIT-1对苯羟化反应的化学亲和选择性及化学稳定性研究

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摘要 以合成后表面接枝的方式制备了长程结构和孔结构均较好的Ti接枝KIT-1催化剂,将其用于苯羟化反应,研究了Ti接枝KIT-1催化剂的苯羟化学性能和稳定性,结果发现:Ti接枝KIT-1催化剂对苯羟化过程表现出化学亲和选择性,即使在过氧 化氢过量的条件下,

也可避免深度氧化的进行: Ti接枝KIT-1催化剂在苯羟化过程 中表现出较好的结构稳定性。

关键词 钛 接枝共聚 催化剂 稳定性 苯 羟基化

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#### Catalytic Performance and Stability of Ti-grafted KIT-1 in the Hydroxylation of Benzene

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**Abstract** Ti containing KIT-1 materials with well ordered long-range and pore structures were prepared by grafting Ti onto the surface of KIT-1. Ti- grafted KIT-1 materials were used as the catalyst for the hydroxylation of benzene. catalytic performance and stability of the catalyst were investigated. The results show that Ti-grafted KIT-1 with hydrophobic surface is much more reactive in the hydroxylation of benzene than that of phenol. The long-range and pore structures of KIT-1 are also stable enough in the hydroxylation.

**Key words** <u>TITANIUM</u> <u>GRAFT COPOLUMERIZATION</u> <u>CATALYST</u> <u>STABILITY</u> <u>BENZENE</u> <u>HYDROXYLATION</u>

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