

催化剂

镁对Pt-Re/ γ -Al₂O₃重整催化剂性能的影响

臧高山¹; 陈志祥¹; 张大庆¹

石油化工科学研究院¹

收稿日期 2006-11-27 修回日期 网络版发布日期 2007-6-19 接受日期

摘要 考察了引入Mg对Pt-Re/ γ -Al₂O₃重整催化剂的影响。结果表明, Mg的不同引入方式对Pt-Re/ γ -Al₂O₃重整催化剂的影响也不同。催化剂浸渍时采用Mg(NO₃)₂·6H₂O的引入方式, 随着Mg含量的增加, 催化剂的持氯能力降低, 硫化后催化剂的硫含量增加, 催化剂的选择性有明显改善, 但催化剂的活性降低; 而采用MgCl₂·6H₂O浸渍方式, 催化剂预处理后的持氯能力提高, 硫化后催化剂硫含量基本保持不变, 催化剂的选择性也有明显改善。控制合适的Mg含量, 催化剂的积炭速率降低, 催化剂的活性稳定性提高。引入镁对Pt-Re/ γ -Al₂O₃重整催化剂的比表面积、孔体积和孔径分布以及Pt金属分散度没有明显改变。

关键词 [镁](#) [重整催化剂](#) [改性](#)

分类号

Effects of Magnesium on the Performance of Pt-Re/ γ -Al₂O₃ Reforming Catalysts

Abstract

Effects of magnesium on the performance of Pt-Re/ γ -Al₂O₃ reforming catalysts have been investigated in this paper. The test results showed that different way of incorporation of magnesium has different influence on the performance of Pt-Re/ γ -Al₂O₃ reforming catalysts. With the content of magnesium increasing by the way of impregnation of Mg(NO₃)₂·6H₂O, catalyst's chlorine-retention ability reduces and its content of sulfur increases. The selectivity of catalyst is obvious improved, but its activity is decreased. The chlorine-retention ability of catalysts by the way of impregnation of MgCl₂·6H₂O increases, and the content of sulfur keeps the normal extent.

Controlling appropriate content of magnesium, carbon deposit velocity of the catalyst decreases and its activity stability increases. No obvious changes were observed of specific surface, pore volume, pore-size distribution and Pt grain size of the catalysts.

Key words [Magnesium](#) [reforming catalyst](#) [modification](#)

DOI:

通讯作者 臧高山 zanggs@ripp-sinopec.com

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(0KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“镁”的 相关文章](#)
- ▶ 本文作者相关文章

- [臧高山](#)
- [陈志祥](#)
- [张大庆](#)