RESEARCH PAPERS

ZX型阻垢剂在食盐电解液蒸发过程中的阻垢性能

陈振兴, 黄彩娟

Institute of Chemistry and Chemical Engineering, Central South University, Changsha 410083, China

收稿日期 修回日期 网络版发布日期 接受日期

摘要 Rapid fouling tests were used to investigate the scale-preventing property of ZX type scale

inhibitors in evaporation of salt electrolyte. ZX type scale inhibitors were tested at high temperature under the boiling conditions. The results indicate that ZX type scale inhibitors have remarkable scale preventing performance during evaporation of salt electrolyte even at the temperature up to 150°C. Among them, ZX III type scale inhibitor is the best with the rate of scale-preventing reaching to 88.9%. In addition, the scale preventing mechanism of ZX type scale inhibitors was analyzed and its application prospect in the field of continuous commercial fouling preventing discussed.

关键词 <u>on-line scale preventing</u> <u>scale inhibitor</u> <u>salt electrolyte</u> <u>evaporation</u> <u>fouling</u> 分类号

刀天、

DOI:

The Performance of ZX Type Scale Inhibitors in Evaporation Process of Salt Electrolyte

CHEN Zhenxing, HUANG Caijuan

Institute of Chemistry and Chemical Engineering, Central South University, Changsha 410083,

China

Received Revised Online Accepted

Abstract Rapid fouling tests were used to investigate the scale-preventing property of ZX type scale inhibitors in evaporation of salt electrolyte. ZX type scale inhibitors were tested at high temperature under the boiling conditions. The results indicate that ZX type scale inhibitors have remarkable scale preventing performance during evaporation of salt electrolyte even at the temperature up to 150°C. Among them, ZX III type scale inhibitor is the best with the rate of scale-preventing reaching to 88.9%. In addition, the scale preventing mechanism of ZX type scale inhibitors was analyzed and its application prospect in the field of continuous commercial fouling preventing discussed.

Key words on-line scale preventing; scale inhibitor; salt electrolyte; evaporation; fouling

通讯作者: 陈振兴 作者个人主页:

陈振兴; 黄彩娟

	扩展功能
	本文信息
	Supporting info
	▶ <u>PDF</u> (1280KB)
083,	▶ <u>[HTML全文]</u> (OKB)
	▶ 参考文献
	服务与反馈
be	▶ <u>把本文推荐给朋友</u>
	▶ <u>加入我的书架</u>
	▶ <u>加入引用管理器</u>
5	▶ <u>引用本文</u>
	▶ <u>Email Alert</u>
ct	▶ <u>文章反馈</u>
	▶ <u>浏览反馈信息</u>
	相关信息
	▶ <u>本刊中 包含 "on-line scale</u>
	preventing"的 相关文章
	▶本文作者相关文章
	· <u>陈振兴</u>
	· <u>黄彩娟</u>