## 反应与分离

Effect of Ultrasound Frequency on the Precipitation Process of Supersaturated Sodium Aluminate Solution

刘吉坡,陈全清,尹周澜,张平民,陈启元

中南大学 化学化工学院

收稿日期 修回日期 网络版发布日期 接受日期

摘要 The effects of frequency of ultrasound on the precipitation process of prepared supersaturated sodium aluminate solutions of practical concentration were studied experimentally under seeded, isothermal, batch crystallization conditions at various temperatures and initial ak(mole ratio of Na2O/Al2O3). The decomposition and the particle number percentage for size below 2 mm at time of 15 h were compared, particle size distribution and SEM photos of the product aluminum hydroxide were also analyzed. The results indicate that the ultrasonic treatment at 16 kHz can enhance the decomposition rate of sodium aluminate solutions, and also has effects on particle morphology and particle size distribution of aluminum hydroxide precipitated.

关键词 ultrasound, sodium aluminate solution, particle size distribution, nucleation

分类号

DOI:

对应的英文版文章: 2003-0193

### 通讯作者:

### s-whs@csu.edu.cn

作者个人主页: 刘吉坡; 陈全清; 尹周澜; 张平民; 陈启元

# 扩展功能

### 本文信息

- ▶ Supporting info
- ▶ <u>PDF</u>(757KB)
- ▶ [HTML全文](OKB)
- ▶参考文献[PDF]
- ▶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
- ▶引用本文
- ▶ Email Alert

## 相关信息

- ▶ 本刊中 包含
- ▶本文作者相关文章
- · 刘吉坡
- · 陈全清
- . 尹周澜
- · 张平民
- · 陈启元