

有机磷化合物的研究 **XXV**: 溶剂性质对烯丙在膦酸酯碳阴离子和芳醛反应区域选择性的影响

袁承业,姚家昌,李树森,马益林,钟心懋

中国科学院上海有机化学研究所

收稿日期 修回日期 网络版发布日期 接受日期

摘要 本文研究烯丙基膦酸二乙酯碳阴离子和苯甲醛,对甲基苯甲醛的反应,考察了溶剂对反应区域选择性的影响.

关键词 [有机磷化合物](#) [膦酸酯类](#) [选择性](#) [乙酯](#) [质子磁共振谱法](#) [溶剂效应](#) [苯甲醛](#) [烯丙基](#) [阴碳离子](#)

分类号 [0627](#)

Studies on organophosphorus compounds XXV: The effect of solvents on the regioselectivity of the reaction of the carbanion of diethyl allylphosphonate with the aromatic aldehydes

YUAN CHENGYE, YAO JIACHANG, LI SHUSEN, MA YILING, ZHONG XINMAO

Abstract The reaction of the carbanion of di-Et allylphosphonate (I) with BzH and p-methylbenzaldehyde was reported. A series of solvents with different polarity was employed to study the effect of solvents on the regioselectivity of the reaction. The reaction was kinetically controlled. The reaction took place predominately on the α -position in THF, and more γ -substituted product was obtained than the α -substituted product in n-pentane. With the addition of complexing agent, such as TMEDA or HMPT, the effect of solvents on the regioselectivity of the reaction decreased.

Key words [ORGANO PHOSPHORUS COMPOUNDS](#) [PHOSPHONIC ACID ESTER](#) [SELECTIVITY](#) [ETHYL ESTER](#) [PROTON MAGNETIC RESONANCE SPECTROMETRY](#) [SOLVENT EFFECT](#) [BENZALDEHYDE](#) [ALLYL GROUP](#) [CARBANION](#)

DOI:

通讯作者

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(274KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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“有机磷化合物”的相关文章](#)
- ▶ 本文作者相关文章

- [袁承业](#)
- [姚家昌](#)
- [李树森](#)
- [马益林](#)
- [钟心懋](#)