

Materials List for:

Synthesis of High Purity Nonsymmetric Dialkylphosphinic Acid Extractants

Junlian Wang¹, Meiying Xie¹, Xinyu Liu¹, Shengming Xu²

¹School of Civil and Resource Engineering, University of Science and Technology Beijing

²Institute of Nuclear and New Energy Technology, Tsinghua University

Correspondence to: Junlian Wang at wangjunlian306@163.com, Shengming Xu at smxu@mail.tsinghua.edu.cn

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Materials

Name	Company	Catalog Number	Comments
2,3-dimethyl-1-butene	Adamas Reagent Co., Ltd.		Molecular formula: C ₆ H ₁₂ , purity ≥99%
diisobutylene	Shanghai Aladdin Bio-Chem Technology Co., LTD		Molecular formula: C ₈ H ₁₆ , purity 97%
acetic acid	Sinopharm Chemical Reagent Co., Ltd.		Molecular formula: C ₂ H ₄ O ₂ , purity ≥99.5%
di-tert-butylperoxide	Sinopharm Chemical Reagent Co., Ltd.		Molecular formula: C ₈ H ₁₈ O ₂ , purity ≥97.0%
tetrahydrofuran	Beijing Chemical Works		Molecular formula: C ₄ H ₈ O, purity A.R.
ethyl ether	Sinopharm Chemical Reagent Co., Ltd.		Molecular formula: C ₄ H ₁₀ O, purity ≥99.7%
ethyl acetate	Xilong Chemical Co., Ltd.		Molecular formula: C ₄ H ₈ O ₂ , purity ≥99.5%
acetone	Beijing Chemical Works		Molecular formula: C ₃ H ₆ O, purity ≥99.5%
sodium hydroxide	Xilong Chemical Co., Ltd.		Molecular formula: NaOH, purity ≥96.0%
concentrated sulfuric acid	Sinopharm Chemical Reagent Co., Ltd.		Molecular formula: H ₂ SO ₄ , purity 95-98%
hydrochloric acid	Beijing Chemical Works		Molecular formula: HCl, purity 36-38%
sodium chloride	Sinopharm Chemical Reagent Co., Ltd.		Molecular formula: NaCl, purity ≥99.5%
anhydrous magnesium sulfate	Tianjin Jinke Institute of Fine Chemical Industry		Molecular formula: MgSO ₄ , purity ≥99.0%