

Research on the Synthesis Process of Isopropyl Xanthogen Polysulfide

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Abstract: The synthesis process of isopropyl xanthogen polysulfide was investigated in this study, and the influence of the raw material ratio, reaction temperature and reaction time of each reaction stage on the production yield was discussed. Based on the experimental results the optimum synthesis conditions for each stage were obtained. In the synthesis of sodium isopropyl xanthate, toluene was used as solvent, the molar ratio of isopropanol, carbon disulfide and NaOH was 1.00 : 0.95 : 0.90, the reaction temperature was in the range of 10 ~ 15 °C, and the reaction time was 12 ~ 14 h. In the synthesis of isopropyl xanthate ester, the molar ratio of sodium isopropyl xanthate and hydrogen peroxide was 1.00 : 0.60, the hydrogen peroxide was added during a period of 5 ~ 6 h, the reaction temperature was maintained at 25 ~ 30 °C, and the reaction was completed about 50 ~ 60 min after the addition of hydrogen peroxide. In the synthesis of isopropyl xanthate polysulfide, the molar ratio of isopropyl xanthate ester and sulfur was 1.0:2.0 and the reaction temperature was 80 ~ 90 °C.

Keywords: sodium isopropyl xanthate; isopropyl xanthate ester; isopropyl xanthogen polysulfide; synthesis process



信息·资讯

美国Lion聚合物公司拟扩增三元乙丙橡胶产能

美国合成橡胶生产商Lion聚合物公司计划扩建其三元乙丙橡胶产能，并且正在考虑投资建设新的乙烷裂解装置。三元乙丙橡胶扩建项目将在公司位于路易斯安那州Geismar的装置上添

加第5条生产线，届时公司年产能将增大6万~8万t。新生产线建成后，公司三元乙丙橡胶总产能将超过20万t。

崔小明

吉林石化添新牌号乙丙橡胶

日前，中国石油吉林石化研究院新牌号J-5105乙丙橡胶产品开发成功。试验结果表明，J-5105乙丙橡胶具有良好的加工性能，包

辊性能优于国外同类产品，与国外的4703牌号乙丙橡胶物理性能高度接近，完全可以替代国外同类产品。

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