

接枝了 SAN 支链,即 EPDM 与 St 和 AN 发生了接枝共聚反应。

3 结语

在 EPDM-g-SAN 的接枝共聚反应中,EPDM/单体质量比、引发剂 BPO 浓度、反应时间,尤其是混合溶剂正庚烷/甲苯并用比和反应温度对单体转化率、接枝率和接枝效率的影响显著,在优化反应条件下,单体转化率、接枝率和接枝效率可分别达到 75%,33%和 36%。

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Study on copolymerization of EPDM-g-SAN

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Abstract: The copolymerization of EPDM-g-SAN using *n*-heptane/toluene as solvent was investigated. The optimized reaction conditions from the test were as follows: the mass ratio of styrene monomer/acrylonitrile monomer 3/1, the mass ratio of EPDM/monomers 45/55, the concentration of initiator BPO $3.38 \times 10^{-3} \text{ mol} \cdot \text{L}^{-1}$, the volume ratio of *n*-heptane/toluene 60/40, the reaction temperature 80 °C and the reaction time 20 h. Under these conditions, the conversion, graft yield and graft efficiency of reaction monomers were 75%, 33% and 36% respectively. It was confirmed by IRS that the branched chain of SAN was grafted on the back-bone of EPDM.

Keywords: EPDM; styrene; acrylonitrile; graft copolymerization

山东安泰研制成功 PU/CR 同步带

中图分类号: TQ336.2 文献标识码: D

一种齿部为聚氨酯材料、背部为 CR 的同步带在山东安泰橡胶有限公司研制成功。该带的研制成功为实现同步形带长时间使用齿部不变形、速比稳定及不丢转提供了技术保证。

本次研制的是与日本挤出机配套的牵引同步带, 主要由带齿、骨架层和背胶三部分组成, 用于牵引外径为 6~60 mm 的挤出胶管, 因此背部设计有半径为 60 mm 的牵引槽, 在牵引直径较大的

胶管时不会有压痕。骨架层为 2 层贴胶 300 型聚酯帆布。齿胶部分采用浇注型聚氨酯材料。该同步带采用二次成型硫化工艺, 先浇注成型齿部, 处理后再进行骨架层及背胶预成型, 最后硫化, 具有优良的耐磨、耐屈挠、耐老化性能且不易变形。

由于采用分体设计及二次成型工艺, 产品的尺寸精度高。经实用考核, 达到日本同类产品的水平, 使用寿命是普通带的 2 倍。

(山东安泰橡胶有限公司 周毅供稿)