

胶的物理性能提高;当乙烯基硅油粘度为 $1 \text{ Pa} \cdot \text{s}$ 、用量为 10 份时,RSiR 硫化胶的物理性能较好,拉伸强度和拉断伸长率分别为 4.2 MPa 和 215% 。

(4)在 RSiR 中添加乙烯基硅油能改善其低温性能,提高热稳定性。与未加乙烯基硅油的 RSiR 相比,加入 10 份乙烯基硅油的 RSiR 硫化胶的起始分解温度、最大分解速率温度和终止分解温度分别提高了 18.2 、 1.3 和 $6.4 \text{ }^\circ\text{C}$ 。

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Effect of Vinyl Silicone Oil on Properties of Reclaimed Silicone Rubber

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Abstract: The effect of the viscosity and addition level of vinyl silicone oil on the properties of reclaimed silicone rubber (RSiR) produced by mechanical shearing was investigated. The results showed that, when the viscosity of added vinyl silicone oil increased, the optimum curing time of RSiR compound prolonged and the physical properties decreased. When the addition level of vinyl silicone oil increased, the maximum torque of RSiR compound decreased, the optimum curing time shortened, and the tensile strength and elongation at break of the RSiR vulcanizates increased. The physical properties of RSiR vulcanizates filled with 10 phr vinyl silicone oil which had the viscosity of $1 \text{ Pa} \cdot \text{s}$ were better. RSiR vulcanizates had only one glass transition temperature (T_g), and when the addition level of vinyl silicone oil increased, the T_g shifted to lower temperature position and the $\tan\delta$ peak became smaller. Vinyl silicone oil could be used to improve the thermal stability of RSiR vulcanizates.

Key words: reclaimed silicone rubber; vinyl silicone oil; physical property

一种橡胶管的制备方法

中图分类号:TQ336.3 文献标志码:D

由比亚迪股份有限公司申请的专利(公开号 CN 102139537A, 公开日期 2011-08-03)“一种橡胶管的制备方法”,提供了一种胶管的制备方法,即将胶料挤出得到内部具有管腔的中空管坯;将管坯第1端封闭,从第2端向管腔中注入惰性

流体直至充满管腔,封闭第2端得到待硫化管坯;将待硫化管坯进行硫化得到胶管前体;将胶管前体封闭的端部开口放出惰性流体得到胶管。采用该方法制备的胶管不会产生偏心问题,而且“脱芯”方便,能极大地提高生产效率,且胶管观性能好,不易产生水痕。

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