

大,拉伸强度和拉断伸长率逐渐减小;ZDMA用量越大,HNBR硫化胶的耐老化性能越好。

(4)延长老化时间或增大 ZDMA 用量,HNBR 硫化胶的 E' 和 E'' 增大, $\tan\delta$ 峰值逐渐减小,损耗模量峰值和 T_g 逐渐向高温方向移动。

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Aging Property of HNBR Reinforced by Zinc Dimethacrylate

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Abstract: The physical properties and dynamic property of HNBR reinforced by zinc dimethacrylate (ZDMA) before and after hot air aging were investigated experimentally. The results showed that, as the addition level of ZDMA increased, t_{10} and t_{90} of HNBR compound shortened, M_L and M_H increased, the Shore A hardness and modulus at 100% elongation of the vulcanizates increased, and the tensile strength and elongation at break increased at first and then decreased. After hot air aging, as the aging time extended, the Shore A hardness and modulus at 100% elongation of the HNBR vulcanizates increased, and the tensile strength and elongation at break decreased. When the aging time extended or the addition level of ZDMA increased, the storage modulus and loss modulus of the HNBR vulcanizates increased, the peak value of loss factor decreased gradually, and the peak value of loss modulus and glass transition temperature shifted gradually to the high temperature region.

Key words: zinc dimethacrylate; HNBR; physical property; dynamic property; aging property

一种卷式硅橡胶聚酯复合薄膜及其生产工艺

中图分类号: TQ333.93; TQ336.4 文献标志码: D

由苏州金禾新材料股份有限公司申请的专利(公开号 CN 102179979A, 公开日期 2011-09-14)“一种卷式硅橡胶聚酯复合薄膜及其生产工艺”, 涉及的卷式硅橡胶聚酯复合薄膜包括硅橡胶薄膜以及可剥离贴附在其表面的聚酯膜, 其中硅橡胶薄膜配方为: 高温硫化型硅橡胶树脂 100, 铂金架桥剂 A 剂 0.4~0.6, 铂金架桥剂 B 剂 1~2.5, 无机添加剂 0.5~5, MQ 硅树脂胶粘剂

1~5。该发明通过在硅橡胶薄膜配方中加入 MQ 硅树脂胶粘剂, 有效改善了硅橡胶薄膜与聚酯膜间的贴附性能, 使两者的剥离力控制在一定范围内, 且剥离力不会随时间的推移而发生急剧变化, 从而使复合薄膜产品易于保存和剥离。该卷式硅橡胶聚酯复合薄膜的生产工艺包括混炼、压延制膜、热空气硫化和收卷 4 步, 操作简单, 步骤少, 不但能提高生产效率, 而且可以节约生产成本。

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