

- [5] de Angelis M G, Sarti G C, Sanguineti A, et al. Permeation, Diffusion, and Sorption of Dimethyl Ether in Fluoroelastomers[J]. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42(10): 1987-2006.
- [6] Valsecchi R, Viganò M, Levi M, et al. Dynamic Mechanical and Rheological Behavior of Fluoroelastomer-Organoclay Nanocomposites Obtained from Different Preparation Methods[J]. Journal of Polymer Science, 2006, 102(5): 4484-4487.
- [7] Ghosh A, De S K. Dependence of Physical Properties and Processing Behavior of Blends of Silicone Rubber and Fluororubber on Blend Morphology[J]. Rubber Chemistry & Technology, 2004, 77(5): 856-873.
- [8] Mitra S, Ghanbari-Siahkali A, Kingshott P. Chemical Degradation of Fluoroelastomer in an Alkaline Environment[J]. Polymer Degradation and Stability, 2004, 83(2): 195-206.
- [9] Hirano K, Suzuki K, Nakano K. Phase Separation Structure in the Polymer Blend of Fluorocarbon Elastomer and Hydrogenated Nitrile Rubber[J]. Journal of Polymer Science, 2005, 95(1): 149-156.
- [10] Gomaa E. Microstructure and Miscibility of Acrylonitrile-Butadiene Rubber/Ethylene-Propylene-Diene Monomer Blends Studied by Positron Annihilation Spectroscopy[J]. Journal of Polymer Science, 2007, 105(5): 2564-2570.
- [11] Triesch O, Niklaus G, Gedenk V. Durability of Filled Natural Rubber and HNBR Compounds at Higher Temperatures[J]. Kautschuk Gummi Kunststoffe, 2007, 60(7/8): 376-379.
- [12] 黄安民, 王小萍, 贾德民. 甲基丙烯酸镁增强氢化丁腈橡胶的结构与形态和性能[J]. 高分子学报, 2007(12): 1154-1160.
- [13] Huang A M, Wang X P, Jia D M. Hydrogenated Nitrile Rubber/Organo-montmorillonite Nanocomposite Prepared by Polymerization in Situ and Intercalation[J]. 合成橡胶工业, 2007, 30(3): 234-237.
- [14] 罗远芳, 王亚明, 刘岚, 等. 支化多酚羟基聚合物及其制备方法[P]. 中国: CN 101280045, 2008-10-08.

收稿日期: 2011-08-18

Preparation and Properties of Branched Polyphenol Hydroxy HNBR/FKM Reactive Blend

WANG Ya-ming^{1,2}, LIU Lan¹, PENG Bing², WU Wen-tao², LUO Yuan-fang¹, JIA De-min¹

(1. South China University of Technology, Guangzhou 510641, China; 2. Guangzhou Mechanical Engineering Research Institute, Guangzhou 510700, China)

Abstract: A branched polyphenol hydroxy HNBR(PHHNBR)/FKM reactive blend was prepared, and its properties were investigated. The results showed that, the PHHNBR has the structure of branched polyphenol hydroxy, and the PHHNBR/FKM reactive blends could be self-vulcanized. The compatibility between FKM and PHHNBR was good, and comparing to FKM vulcanizates, the tensile strength of blend was higher, the tear strength was similar, the glass transition temperature was lower, and the low temperature resistance was better.

Key words: FKM; branched polyphenol hydroxy HNBR; reactive blend; glass transition temperature

利用丁腈橡胶制造轿车刹车片 消音材料的方法

中图分类号: TQ333.7; TQ336.4+2 文献标志码: D

由信义集团公司申请的专利(公开号 CN 101735496A, 公开日期 2010-06-16)“利用丁腈橡胶制造轿车刹车片消音材料的方法”, 提供了一种利用丁腈橡胶(NBR)制造轿车刹车片消音材料的方法, 即将生胶、促进剂 DM、氧化锌、硬脂

酸、硫黄、炭黑、轻质碳酸钙和防老剂 4010 经过配料→混炼→成型→硫化→检验工艺加工制成。其配方为: NBR 100, 炭黑 50~70, 轻质碳酸钙 25~50, 氧化锌 4~6, 硬脂酸 1~5, 防老剂 4010 1~3, 硫黄 1~2, 促进剂 DM 1.5。该轿车刹车片消音材料减震效果良好, 噪声在 70 dB 以下, 能够满足目前轿车刹车片减震降噪的要求。

(本刊编辑部 赵敏)