

- sion and Adhesives, 2001, 21(2): 161-172.
- [5] Desai S D, Emanuel A L, Sinha V K. Polyester Polyol-Based Polyurethane Adhesive; Effect of Treatment on Rubber Surface[J]. Journal of Polymer Research, 2003, 10(3): 141-149.
- [6] Romero-Sánchez M D, Martín-Martínez J M. Surface Modifications of Vulcanized SBR Rubber by Treatment with Atmospheric Pressure Plasma Torch[J]. International Journal of Adhesion and Adhesives, 2006, 26(5): 345-354.
- [7] Tyczkowski J, Krawczyk I, Wozniak B. Modification of Styrene-Butadiene Rubber Surfaces by Plasma Chlorination[J]. Surface and Coatings Technology, 2003, 174(75): 849-853.
- [8] Romero-Sánchez M D, Walzak M J, Torregrosa-Maciá R, et al. Surface Modifications and Adhesion of SBS Rubber Containing Calcium Carbonate Filler by Treatment with UV Radiation[J]. International Journal of Adhesion and Adhesives, 2007, 27(6): 434-445.
- [9] Romero-Sánchez M D, Pastor-Blas M M, Martín-Martínez J M. Treatment of a Styrene-Butadiene-Styrene Rubber with Corona Discharge to Improve the Adhesion to Polyurethane Adhesive[J]. International Journal of Adhesion and Adhesives, 2003, 23(1): 49-57.
- [10] 石锐, 田明, 齐卿, 等. 橡胶表面改性的方法[J]. 橡胶工业, 2006, 53(3): 186-191.

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Influence of Surface Treatment on Adhesion Property of NR

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Abstract: The influence of three surface treatment methods on the interface adhesion property of NR was investigated, i. e. mechanical polishing, sulfuric acid treatment and sodium hypochlorite treatment. The results showed that, treated with sulfuric acid, the contact angle of NR vulcanizate with water decreased significantly, the wettability improved, and the adhesion property increased significantly. The adhesion property of NR vulcanizate treated with sulfuric acid was better than that of NR vulcanizate treated with mechanical polishing or sodium hypochlorite.

Key words: NR; surface treatment; adhesion property

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