
B.5.5.**Study on Properties of Rubber Improved with Nanomaterial Used in Cable**

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The properties of the rubber (CR) can be improved on many aspects by adding nanomaterial based on the special effects of it. This paper focuses on the study of the influence on mechanical and dielectric properties of the rubber by changing the kind, particle dimension and surface treatment method of the added nanoparticles. The result shows that the effects on the base rubber are different according to different kind and content of the nanoparticles. In conclusion, the mechanical intensity and ductility of the composite are increased; the sulfuration time is cut down. And at the same time the dielectric properties' deterioration has not been found, some parameter gets a certain development.

Keyword: nanomaterial, cable, mechanical property, dielectric property