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cal type S-dewall formulation based on 50:50 polypropylene-polybutadiene. The results showed that polypropylenyl aromatic amines were highly effective antioxidants in terms of their ability to prevent the degradation of macromolecules caused by exposure to elevated temperatures, mechanical loads and oxidants. It was also shown that, in mixtures of Novaxator-8PEDA (a phenylenediamine-based product) and one of the new stabilisers, synergism of their stabilising capacity occurred. The new stabilisers were manufactured from Russian-produced feedstock so should aid in import substitution. 4 refs. (Article translated from: *Kauchuk i Rezina*, no. 6, 2015, pp.18-21)

Title: Investigation of the tribological and adhesive properties of cold-resistant rubbers

Page Range: p.1727-1732

Author(s): Morozov A.V., Murev'eva T.I., Petrova N.N., Portnyagina V.V., Ammosova V.N., Zogorskiĭ D.I.

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Abstract

A study was made of the influence of the composition of rubber compounds based on propylene oxide rubber on the adhesive and viscoelastic properties and the tribological characteristics of these materials at low temperatures. Some of the propylene oxide rubber compounds contained a filler, either ultradisperse PTFE powder or carbon black. Introduction of carbon black into the formulation significantly affected the structure and properties of the rubber compound specimen, lowering the friction coefficient significantly, while introduction of PTFE with a low friction coefficient changed the properties of the surface slightly, also lowering the friction coefficient significantly. The friction coefficients of the propylene oxide rubber compounds containing PTFE or carbon black at the sub-zero temperatures studied (-15 or -25 deg C) were practically constant, which made it possible to assume the stable operation of seals manufactured from them in real seals undergoing dynamic loads and cyclic strains. 10 refs. (Article translated from *Kauchuk i Rezina*, no. 6, 2015, pp.22-26)

Title: Ways of improving the service life of rubber-reinforced tracks

Page Range: p.1733-1736

Author(s): Bejmanov V.D., Fedotkin R.S., Koyushkov V.A., Alendeev E.M., Kupryumin D.G.