

AGEING OF RUBBER COMPOUNDS CONTAINING VEGETABLE OILS

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Abstract

Results of preliminary investigations on the influence of vegetable oils on physical properties of rubber compounds and vulcanisates there are presented.

Natural rubber (NR), isoprene rubber (IR), butadiene-styrene rubber (SBR), chloroprene rubber (CR) and ethylene-propylene-diene-terpolymer compounds were investigated. Rheological properties of the compounds obtained were characterized and the influence of individual oils on the strength properties of vulcanisates, resistance to low temperature and accelerated ageing were determined in comparison to the compounds with traditionally used softeners.

Positive results of these initial trials point at advisability of further, widened research bonded with use of vegetable oils in specific technological applications (taking into consideration more and more beneficial price relations between products obtained from crude oil and the one from renewable resources).