

Thematic course: Research of influence of technological additives on properties of rubbers based on BNR of new generation. Part 6.

Combinations of softeners with fillers for increasing rubber frost resistance

© Nikolay I. Koltsov,^{1*} Nikolay F. Ushmarin,² Svetlana A. Issakova,² Svetlana S. Vinogorova,¹
Nadezhda A. Chernova,² Nina N. Petrova,² and Mikhail V. Kuzmin¹

¹Department of Physical Chemistry and Macromolecular Compounds. I.N. Ulyanov Chuvash State University. Moscow St., 15. Cheboksary, 428015. Chuvash Republic. Russia. Phone: +7 (8352) 45-24-68.

E-mail: koltsovni@mail.ru

²Department of Rubber-Technical Products. V.I. Chapaev Cheboksary Production Association. Socialist St., 1. Cheboksary, 428006. Chuvash Republic. Russia. Phone: +7 (8352) 39-62-39.

*Supervising author; [†]Corresponding author

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Abstract

Efficiency of action of various softeners combinations (dibutylphthalate, dibutylsebacinate, ocsale, trichloroethylphosphate, trichloropropylphosphate) with fillers (carbosil *KC-20*, nanoshungite) and a technological additive zincolet *BB-222* on frost resistance of rubber based on butadien-nitrile rubbers of marks *BNKS-18 AMN* and *CKN-18 PVC-30* is investigated. It is established that the combination of trichloroethylphosphate with carbosil *KC-20* and a technological additive zincolet *BB-222* increases frost resistance, improves plasto-elastic and physico-mechanical properties, as well as thermal stability of rubber.