

## Water-emulsion desensitization of pyroxylin powders having a camphor basis

© Tatiana A. Eneykina,\* Gulsina M. Hairullina,<sup>†</sup> Andrey S. Arutyunyan,\* Roza F. Gatina,  
Ekaterina V. Hotuleva, Vera A. Skarlukhina, Yuriy V. Alekseev,  
Alexey I. Hatsrinov, and Yuriy M. Mikhailov

State Scientific-Research Institute of Chemical Products. Svetlaya St., 1.

Kazan, 420033. Tatarstan Republic. Russia. Phone: +7 (843) 541-76-02. E-mail: hgm1961@rambler.ru

\*Supervising author; <sup>†</sup>Corresponding author

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### Abstract

We studied water-emulsion desensitization of pyroxylin powders at temperatures of 70, 80 and 95 °C by the compounds of "camphor:diphenylamine" in different temperature ranges (50:50 and 65:35, respectively). It has been established that the loss of camphor depends on temperature, duration of treatment of the material and the content of camphor in the binary desensitization. The smallest loss of camphor is observed at 95 °C due to the enhanced diffusion processes, which determine its content in the powder matrix. Reduction of camphor in desensitization emulsion with 1.95 to 1.0 % wt. at the similar mass fraction in the powder equal to 0.6%, allows to reduce the loss of the component from 69 to 30-40%.