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Investigation of the processes of amorphization in binary phlegmatizing compositions

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Abstract

Using the method of IR-spectroscopy we studied physic-chemical interactions of the components in the compositions: diphenylamine – camphor, diphenylamine – *N,N′*-dimethyl-*N,N′*- diphenylurea (centralyte II) dibutylphthalate – camphor, dinitrotoluene – camphor, *N,N′*-diethyl-*N,N′*- diphenylurea (centralyte I) – centralyte II. It has been established that the degree of crystallinity in phlegmatizers binary mixtures of spherical powders increases in the series: diphenylamine – camphor > dinitrotoluene – camphor > diphenylamine – centralyte II > centralyte I – centralyte II. For the composition dibutylphthalate – camphor we observed the process of physical dissolution of camphor in dibutylphthalate, not accompanied by the formation of complexes.