

STUDY OF PROPERTIES OF CAST EXPLOSIVES BASED ON FLAMMABLE BINDERS WITH AZOLE POLYMERS

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A mixture of liquid nitrate esters with polymer additive is used as a binder in modern plastisol high explosives (HEs). According to preliminary assessment, the use of an energy-saturated azole polymer instead of the currently used binder will allow increasing chemical and physical resistance as well as their performance and safety characteristics.

Azole polymers have high density, thermal and chemical stability, low sensitivity to impact and friction, positive enthalpy of formation, and pronounced phlegmatization effect.

The paper presents the results of studying the cast explosive compositions obtained using azole polymer-based flammable binders.
