EFFECT OF IMPURITIES IN TATB COMPOSITION ON ITS STRESS-STRAIN AND GAS-DYNAMIC CHARACTERISTICS

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The paper presents the results of studying the effect of impurities in TATB composition on its stress-strain and gas-dynamic characteristics.

The results of studies have shown that the introduction of impurities in the TATB synthesis process has an effect on the crystal form, leading to defects, formation of aggregates and agglomerates. The availability of aggregated crystals can improve stress-strain characteristics of pressed samples.

During the studies it has been observed that the availability of impurities effects gas-dynamic characteristics of TATB, such as the detonation velocity and shock-wave sensitivity.