

SENSITIVITY TO IMPACT OF MIXTURES OF OCTOGEN WITH FERRIC OXIDE

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Abstract: Results of drop-weight machine experiments on mixtures of HMX with ferric oxide in all domain of components concentration are presented. The high-sensitivity concentration area occupies a large interval of values $0.3 < \alpha < 0.7$. The mathematical model of frictional explosion initiation, agreeing well with the experiment, is developed. The optimal sizes of solid particles sensibilizing explosion mixture are determined.

Keywords: explosive; impact; explosion; sensitivity; sensitisation; friction model

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