Calibration of the equation of state of the products of the explosion of plasticized octogen on the results of experiments on the acceleration of liners

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The paper presents the results of the computational and experimental analysis of the results of experiments on the study of the propellant ability of the plasticized octogen in the interests of verifying the equations of state of its explosion products. Experimentally, continuous registration of the movement of liners made of aluminum and tungsten-nickel-iron alloy, thrown by the products of the explosion of plasticized octogen, was carried out. The parameters of the equations of state of the explosion products were calibrated based on the results of experimental data for three forms of the equation of state of the explosion products. Computational and theoretical analysis has shown that the use of new modern research methods makes it possible to carry out a better calibration of the parameters of the equations of state of the explosion products, and the use of various liners to obtain data for various areas of the state of matter.