

Insensitivity of Explosive Using Crystallization Coating Process

정재욱, 김두용, 김광주*, 김현수¹
한밭대학교; ¹국방과학연구소
(kjkim@hanbat.ac.kr*)

According to application of explosive extensively used not only military but also civilian, the interest regarding stability of explosive was increased. Presently insensitivity of explosive was issued in the world-wide. In this study, we improve the stability of explosive with minimized deterioration using coating crystallization in order to preserve the individual properties of explosive. As a promising method, we now develop the minutely control of coating thickness with various operation in the crystallization using seed crystal. The sensitive explosive HMX was coated with a less-sensitive explosive, NTO(3-nitro-1,2,4-triazole-5-one) by cooling crystallization. Consequently, HMX crystals coated with NTO by crystallization were less sensitive than HMX crystals.