Crystallization controls the crystalline size of high explosive materials

Crystallization is a technology that separates certain ingredients in a solution by controlling temperature, saturation, solubility, etc.

In particular, the process of generating crystals is important, and physical properties such as purity, crystal size, etc. can be controlled depending on the presence or absence of Seed.

The high explosive material used in this study has four types of  $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $\delta$ -forms with different crystal structures. In this study, the crystallization of the high explosive material of  $\beta$ -form, which has the highest density among these polymorphs, was studied.

Crystallization method is cooling crystallization.

By adding a small amount of surfactant, the effect of the type of surfactant was investigated.

In this study, the process of cooling crystallization allowed the production of particulates using Seed.