

分离工程

超声波对三水醋酸钠相分离及结晶的影响

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摘要

关键词

[三水醋酸钠](#) [相分离](#) [过冷](#) [结晶](#) [超声波](#)

分类号

Effects of ultrasound on phase separation and crystallization of sodium acetate trihydrate

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Abstract

The effects of ultrasonic radiation on phase separation as well as the crystallization of sodium acetate trihydrate, a typical salt hydrate phase change material (PCM), were studied experimentally. It is shown that ultrasonic radiation may inhibit phase separation to a certain degree. The influence of ultrasonic radiation on crystallization is also found. The addition of PCM grain can inhibit supercooling effectively. The crystallization is related to the supercooling degree. Furthermore, the effects of ultrasonic radiation on inhibiting phase separation of salt hydrates are discussed based on theoretical analysis.

Key words

[sodium acetate trihydrate](#) [phase separation](#) [supercooling](#) [crystallization](#) [ultrasound](#)

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