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## Desensitizing Technology of CL-20 by Coating Wax and Estane5703

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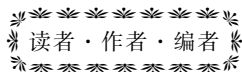
**Abstract:** Four kinds of hexanitrohexaazaisowurtzitanes (CL-20) based composite particles were prepared by slurry method using CL-20 as filler, wax and Estane5703 as desensitizers. The crystal form, state of coating, thermal decomposition temperature of samples before and after coating were characterized by X-ray diffractometer (XRD), scanning electron microscope (SEM), differential scanning calorimeter (DSC), and the mechanical sensitivity was tested. Results show that CL-20 is coated by wax and Estane5703 perfectly, and the  $\epsilon$  crystal form of CL-20 was not changed. The impact sensitivity and friction sensitivity of CL-20 decrease from 100% to 40% and 48%, and thermal decomposition peak temperature increases by 5.4 °C compared with raw material when the wax and Estane5703 content are all 2%.

**Key words:** hexanitrohexaazaisowurtzitanes (CL-20); wax/Estane5703; coating; sensitivity

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## 《含能材料》“含能共晶”征稿

含能共晶是不同含能分子通过氢键等相互作用力形成的具有稳定结构和性能分子晶体。含能共晶充分组合了单质含能分子的优点,呈现出感度低,综合性能优良的特点,具有潜在的应用前景,共晶研究已经引起国内外含能材料学界的高度关注。为推动含能共晶的研究和交流,本刊特推出“含能共晶”专栏,主要征稿范围包括含能共晶晶体设计与性能预测、含能共晶的制备、结构解析、性能等。来稿请注明“含能共晶”专栏。

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