淀粉基多孔高吸水树脂致孔剂对吸液速率影响 Effect of Porosity Generators on Absorbency Rate Starch-based Superabsorbent

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关键词： 高吸水树脂 致孔剂 吸液速率

摘 要： 研究了淀粉基多孔高吸水树脂的合成及其吸液性质，比较了不同致孔剂如丙酮、碳酸氢钠、蔗糖对树脂吸液速率的影响。结果表明，添加致孔剂能有效提高树脂的吸液速率，碳酸氢钠具有较好的致孔效果。扫描电镜分析证明，合成的高吸水树脂具有疏松的多孔结构，它是提高高吸水树脂吸液速率的主要原因。In this paper, the synthesis of porous superabsorbent was performed using sodium bicarbonate, acetone, and sucrose as porosity generators. Compared to the superabsorbent prepared under porous-free condition, the results showed that porosity generators can improve absorbency rate effectively, and that sodium bicarbonate has a better effect than others. Morphological studies with scanning electron microscope (SEM) showed that the superabsorbent has the loose and porous structure.

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