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Effects of Polymethylsilsesquioxane concentration on morphology shape of electrosprayed particles

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Abstract

The investigation of unique sizes and shapes as they relate to various properties has become a great study for large field applications. Polymethylsilsesquioxane (PMSQ) particles are produced by electrospraying. Morphology of the electrosprayed particles develops from the needle-like to star-like particles by controlling the concentration of the polymer solution. Therefore, electrospraying process instead of conventional methods has opened up an alternative for the fabrication of particles by controlling with three main parameters (applied voltage, flow rate and concentration of the polymer) that are used to manipulate their morphologies during preparation.

Keywords:

Electrospraying, Polymethylsilsesquioxane, particles, morphological control

1. Introduction

Biocompatible polymers have widely used many applications in the pharmaceutical, cosmetic, and food industries in recent years [1-3]. Polymethylsilsesquioxane

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