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The effects of small additions of ionic liquids on the process of electrospinning of nonwovens of polypropylene melts with different melt flow index

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Abstract

The influence of the addition of ionic liquids on polypropylene melt electrospinning process in the preparation of nonwoven materials is presented in this paper. Nonwoven materials with average fiber diameters 5-23 μm was produced from melts of polypropylenes with different melt flow index. It has been shown that on introducing low molecular weight additives and reducing the polymer molecular weight the diameter of microfibers is reduced due to increasing the conductivity of the polymer.