عنوان مقاله:

Study on Physical Properties of Poly(ethylene terephthalate) Bi-shrinkage Yarns

محل انتشار:

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خلاصه مقاله:

Experimental and statistical properties of bi-shrinkage yarns (BSY) were studied by combining multifilament yarns of poly(ethylene terephthalate) containing partially oriented yarn and fully drawn yarn with different finenesses. In this procedure, different twists per meter (۵۰۰, ۱۰۰۰, and ۱۵۰۰ tpm) were applied to different BSYs. Then tensile, shrinkage, and appearance properties of the samples were analyzed. The appearance properties of the BSYs showed that they are very similar to multifilament textured yarns. The most important factor affecting the BSYs properties is the filaments' number of yarns. The best mechanical, shrinkage, and appearance properties were observed in the samples containing two components with the same number of filaments (regular or microfilament yarns). Also, statistical studies showed the most important factor affecting the BSYs properties was filaments' number of yarns. .Moreover, the number of twists per meter of BSY's is an effective parameter

کلمات کلیدی:

bi-shrinkage yarn, bulk, physical properties, poly(ethylene terephthalate), partially oriented yarn (POY), fully drawn yarn (FDY), microfilament yarn