

Title (en)
POLYOLEFIN-BASED SYNTHETIC FIBERS AND PRODUCTION METHOD THEREOF

Title (de)
POLYOLEFINBASIERENDE SYNTHESEFASERN UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
FIBRES SYNTHETIQUES A BASE DE POLYOLEFINE, ET PROCEDE DE FABRICATION

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Application
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Abstract (en)
[origin: WO03029536A1] The invention provides a method for making fibers and yarns having improved dyeability with reactive and disperse dyes, resistance to staining and improved mechanical properties and characteristics. The method includes blending a polyolefin polymer and a fibril forming polymer to provide a mixture of polyolefin and fibril forming polymers. The mixture is conducted to a hot melt extruder to provide a substantially homogenous molten mixture of polyolefin and fibril forming polymers. The molten mixture is forced through a spinneret having a length to diameter (L/D) ratio ranging from about 3 to about 30 to provide a fiber having a polyolefin matrix and elongate, substantially discontinuous fibrils of the fibril forming polymer dispersed into the polyolefin matrix, whereby the exterior surface of the fibers is substantially devoid of fibrils. Fibers made by the process of the invention are useful as carpet face yarn, in textiles, upholstery and other industrial applications, like chemical industry and others.

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