

Title (en)

METHOD FOR MAKING PROPYLENE MONOFILAMENTS, PROPYLENE MONOFILAMENTS AND THEIR USE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON MONOFILAMENTEN AUS POLYPROPYLEN, MONOFILAMENTE AUS POLYPROPYLEN SOWIE DEREN VERWENDUNG

Title (fr)

PROCEDE DE FABRICATION DE MONOFILAMENTS DE POLYPROPYLENE, MONOFILAMENTS DE POLYPROPYLENE ET LEUR UTILISATION

Publication

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Application

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Abstract (en)

[origin: WO03048434A1] The invention concerns a method for making propylene monofilaments having a 230 DEG C/2.16 kg melt flow index (MFI) from 2 to 16 g/10 min, having a diameter larger than 0.050 mm and improved abrasion resistance, which consists in adding to the polypropylene 20 to 0.1 wt. % of an additive upstream of the extruder, spinning the molten material in a water bath, drawing it and winding it. The invention also concerns a polypropylene monofilament having a 230 DEG C/2.6 kg melt flow index (MFI) from 2 to 16 g/10 min, having a diameter greater than 0.050 mm and improved abrasion resistance, exhibiting a strength of at least 50 cN/tex, for an elongation corresponding to the maximum tensile stress (elongation at rupture) of at least 30 %. Furthermore, it has an abrasion of less than 0.05 % and a relative tensile energy absorption > 100 % after being treated for 24 hours at 120 DEG C.

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