

Title (en)

NANOCOMPOSITES BASED ON POLYOLEFIN, METHOD FOR THE PRODUCTION THEREOF, AND USE OF THE SAME

Title (de)

NANOKOMPOSITEN AUF POLYOLEFIN-BASIS UND VERFAHREN ZU DEREN HERSTELLUNG SOWIE DEREN VERWENDUNG

Title (fr)

NANOCOMPOSITES A BASE DE POLYOLEFINE, LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION

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Application

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Abstract (en)

[origin: WO03097738A1] The invention relates to nanocomposites based on HDPE-polyolefin with improved mechanical properties, especially an increased E module and an improved notch value. Said nanocomposites contain at least two thermoplastic plastics: (A) a polyolefin, preferably between 70 and 99 wt. % of polyethylene, (B) a polyamide, preferably between 1 and 30 wt. % of polyamide 6, and between 1 and 10 wt. % of an organophylically formed phyllosilicate. Optionally, a polyolefin grafted by maleic anhydride is added, forming between 1 and 10 wt. % of the total quantity. The invention also relates to a method for producing said nanocomposites and to the use of the same as injection moulded parts, containers or pipes.

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