

Title (en)

METHOD FOR PRODUCING A PLASTIC GRANULATE, AND USE OF THE GRANULATE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KUNSTSTOFFGRANULATS, UND VERWENDUNG DES GRANULATS

Title (fr)

MÉTHODE DE PRODUCTION D'UN GRANULÉ DE PLASTIQUE ET UTILISATION DU GRANULÉ

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Application

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Abstract (en)

[origin: WO2023017038A1] The invention relates to a method for producing granulate for the production of extrusion-blow-moulded hollow bodies, the method comprising the steps of: (a) sorting, by type, washing and comminuting PET articles originating from post-consumer collection of plastic packaging; (b) removing contaminants such as metal or paper before, at the same time as or after method step (a); (c) premixing PET material from various by-type sorting processes according to step (a) such that the Trouton ratio of the mixed PET material at a shear rate of 50 to 200 s⁻¹ is less than 4; (d) drying the PET material obtained from step (a) and (b); (e) melting the dried PET material; (f) pressing the PET material through a melt filter; (g) dividing the PET material into individual melt flows; (h) cooling and solidifying the melt flows in a water bath and granulating, wherein the granulates obtained have an intrinsic viscosity of 0.5 to 0.75 dl/g; (i) crystallising the granulates; and (j) drying and condensing the crystallised granulates in a solid-phase polycondensation reactor until they obtain an intrinsic viscosity of 1.0 to 1.7 dl/g.

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