

Title (en)
HYPERBRANCHED POLYESTERS

Title (de)
HYPERVERZWEIGTE POLYESTER

Title (fr)
POLYESTERS HYPERRAMIFIES

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Application
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Abstract (en)
[origin: WO0059982A1] The invention relates to hyperbranched polyesters, to a process for the manufacture thereof, to their use in unsaturated polyester preparations and to curable resins comprising hyperbranched polyesters. The process for the manufacture of hyperbranched polyesters comprises the following steps: a) reacting a polycarboxylic anhydride with 2 to 4 carboxyl groups, preferably free carboxyl groups, with a polyol with 2 to 10 reactive hydroxyl groups, preferably of equivalent reactivity, in the presence of an amine, the amount of anhydride being at least 1 mol of anhydride per hydroxyl group of the polyol; and b) reacting the product from step a) with glycidyl (meth)acrylate or allyl glycidyl ether in an amount of at least corresponding to 1 mol of glycidyl (meth)acrylate or allyl glycidyl ether per free carboxylic acid group of the product a); and c) product from the second step b) is further reacted with an unsaturated, aromatic or aliphatic anhydride in an amount sufficient to esterify a part of or all free hydroxyl groups of the product from step b).

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