

Title (en)
METHOD FOR PRODUCING POLYURETHANE PREPOLYMERS HAVING A LOW CONTENT OF MONOMERS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON MONOMERARMEN POLYURETHAN PREPOLYMEREN

Title (fr)
PROCEDE POUR PRODUIRE DES PREPOLYMERES POLYURETHANNE A FAIBLE TENEUR EN MONOMERES

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Application
EP 02793051 A 20021217

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Abstract (en)
[origin: WO03051951A1] The invention relates to a method for producing polyurethane prepolymers having terminal isocyanate groups during which polyisocyanates are reacted with polyols, whereby the following is effected in a first synthesis step (I): a) at least one asymmetrical diisocyanate is used as the polyisocyanate; b) at least one polyol having an average molecular weight (Mn) ranging from 60 to 3000 g/mol is used as the polyol; c) the ratio of isocyanate groups to hydroxyl groups ranges from 1.2: 1 to 4: 1; d) a catalyst is added, and after a successful reaction, the following is effected in a second synthesis step (II): e) at least one additional polyol is added in order to obtain a total ratio of isocyanate groups to hydroxyl groups ranging from 1.1: 1 to 2: 1. Polyurethane prepolymers produced in the aforementioned manner are suited for producing reactive one-component and two-component adhesives and sealants, particularly laminating adhesives, and as components for producing hot-melt adhesives. The polyurethane prepolymers produced according to the invention are low-viscous, have a low content of monomers, and do not contain any byproducts like those that usually result when thermally processing polyurethane prepolymers in order to demonomerize the same.

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Cited by
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