Title (en)

METHOD FOR PRODUCING OXYMETHYLENE-POLYMERS IN THE HOMOGENEOUS PHASE AND USE THEREOF

Title (de)

VERFAHREN ZUR HERSTELLUNG VON OXYMETHYLEN-POLYMEREN IN HOMOGENER PHASE UND VERWENDUNG

Title (fr)

PROCEDE DE PRODUCTION DE POLYMERES D'OXYMETHYLENE EN PHASE HOMOGENE ET UTILISATION DESDITS POLYMERES

Publication

EP 1969023 A1 20080917 (DE)

Application

EP 06829590 A 20061214

Priority

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- DE 102005062327 A 20051224

Abstract (en)

[origin: DE102005062327A1] A method for the production of oxymethylene homopolymers involves (i) homogeneous polymerisation of an oxymethylene unit-forming monomer in presence of a formaldehyde acetal and a cationic polymerisation initiator, and (ii) stopping polymerisation before thermodynamic equilibrium and at less than 90% of maximum conversion, by (iii) deactivating the active polymer chain with an organic or inorganic base. A method for the production of oxymethylene homopolymers of formula R 1>-(OCH 2) n-O-R 2>(I) containing up to 0.5 wt% oxyethylene groups and/or up to 1 wt% branching units, in which R 1>, R 2>alkyl; n : 500 or more . This method involves (i) polymerisation of a -CH 2O- unit-forming monomer (M) in a homogeneous phase in presence of a formaldehyde acetal (II) and an initiator (IV) for cationic polymerisation, and (ii) stopping polymerisation before reaching thermodynamic equilibrium and at less than 90% of maximum conversion, by (iii) deactivation of the active polymer chain in the homogeneous phase by treatment with a dissolved or dispersed organic or inorganic base.

IPC 8 full level

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