

Title (en)

METHOD FOR PRODUCTION OF RADICALLY POST-CURED POLYMERS BY ADDITION OF STRUCTURAL COMPONENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG RADIKALISCH NACHVERNETZTER POLYMERE UNTER EINSATZ VON AUFBAUKOMPONENTEN

Title (fr)

PROCEDE DE PREPARATION DE POLYMERES POSTRETICULES PAR VOIE RADICALEIRE, PAR UTILISATION D'ELEMENTS STRUCTURELS

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Application

**EP 01946880 A 20010122**

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Abstract (en)

[origin: DE10003940A1] The invention relates to a method for production of radically post-cured polymers. In a first stage, at least one, or several compounds (a), which are the reaction products of epoxidised fatty acid esters and /or epoxidised triglycerides with acrylic acid and/or methacrylic acid, are converted into the corresponding polyurethane (a\*) and said polyurethane (a\*) is subsequently radically post-cured, in a second stage, in the presence of at least one radical initiator (b), with the additional proviso that, in the second stage, a combination of compounds (a\*) with one or several compounds (c) are used, where the compounds (c) are chosen from the group acrolein, acrylamide, vinyl acetate and styrol. The polymers thus obtained are excellent matrix agents for composite materials.

[origin: DE10003940A1] Preparation of a radically crosslinked polymer comprises reacting a compound(s) (I), comprising the reaction products of epoxidized fatty acid esters and/or triglycerides with acrylic and/or methacrylic acid, with aliphatic and/or aromatic isocyanates to give a polyurethane, mixing with an acrolein, acrylamide, vinyl acetate or styrene and then crosslinking using a radical initiator(s). Preparation of a radically crosslinked polymer comprises reacting a compound(s) (I), comprising the reaction products of epoxidized fatty acid esters and/or triglycerides with acrylic and/or methacrylic acid, with aliphatic and/or aromatic isocyanates to give a polyurethane (PU), mixing with a second compound (II) from acrolein, acrylamide, vinyl acetate and styrene and then crosslinking using a radical initiator(s). An independent claim is included for a polymer-based workpiece obtained as above.

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