Claims

1. A composition which can be used in a structural adhesive, comprising a free radical polymerization initiating agent and an epoxidized silane.

2. The composition as claimed in claim 1, characterized in that it does not comprise a plasticizing agent or in that it comprises at most 20% (by weight) of plasticizing agent.

3. The composition as claimed in either of claims 1 and 2, characterized in that the free radical polymerization initiating agent is a peroxide.

4. The composition as claimed in claim 3, characterized in that said peroxide is benzoyl peroxide.

5. The composition as claimed in one of claims 1 to 4, characterized in that it comprises between 5 and 40% by weight of polymerization initiating agent.

6. The composition as claimed in one of claims 1 to 5, characterized in that it comprises between 10 and 20% by weight of polymerization initiating agent.

7. The composition as claimed in one of claims 1 to 6, characterized in that it additionally comprises an epoxide resin.

8. The composition as claimed in one of claims 1 to 7, characterized in that it additionally comprises inorganic fillers.

9. The use of a composition as claimed in one of

claims 1 to 8 for initiating the polymerization of a (meth)acrylic resin.

10. The use as claimed in claim 9, characterized in that said composition is used in a ratio 1:1 to 1:30 (by volume) with respect to said resin.

11. The use as claimed in claim 10, characterized in that the composition is used in a ratio of 1:10 by volume (one part of composition per 10 parts of resin).

12. The use as claimed in one of claims 9 to 11, characterized in that said resin additionally comprises at least one other element chosen from an elastomeric block copolymer comprising styrene and isoprene, an elastomeric block copolymer comprising styrene and butadiene or ethylene, an elastomer, an acrylate ester monomer in which the alcohol part exhibits at least one linear chain of at least 6 carbon atoms, a polymerization accelerator, a rheological agent, an adhesion promoter, an acid monomer, particles formed of a thermoplastic shell and of an elastomeric core (acrylonitrile/butadiene/styrene, methacrylate/butadiene/styrene, methacrylate/acrylonitrile/butadiene/styrene or methacrylate/acrylonitrile particles and the mixtures of these).

13. The use as claimed in one of claims 9 to 12 for promoting the adhesion of parts to composites, in particular RTM (resin transfer molded) composites.

AMENDED CLAIMS
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1. A polymerization-catalyzing agent, which can be used in a structural adhesive and which is intended to be added to a resin comprising monomer agents in order to initiate the polymerization thereof, comprising a free radical polymerization initiating agent and an epoxidized silane.

2. The catalyzing agent as claimed in claim 1, characterized in that it does not comprise a plasticizing agent or in that it comprises at most 20% (by weight) of plasticizing agent.

3. The catalyzing agent as claimed in either of claims 1 and 2, characterized in that the free radical polymerization initiating agent is a peroxide.

4. The catalyzing agent as claimed in claim 3, characterized in that said peroxide is benzoyl peroxide.

5. The catalyzing agent as claimed in one of claims 1 to 4, characterized in that it comprises between 5 and 40% by weight of polymerization initiating agent.

6. The catalyzing agent as claimed in one of claims 1 to 5, characterized in that it comprises between 10 and 20% by weight of polymerization initiating agent.

7. The catalyzing agent as claimed in one of claims 1 to 6, characterized in that it additionally

comprises an epoxide resin.

8. The catalyzing agent as claimed in one of claims 1 to 7, characterized in that it additionally comprises inorganic fillers.

9. The use of a catalyzing agent as claimed in one of claims 1 to 8 for initiating the polymerization of a (meth)acrylic resin.

10. The use as claimed in claim 9, characterized in that said catalyzing agent is used in a ratio 1:1 to 1:30 (by volume) with respect to said resin.

11. The use as claimed in claim 10, characterized in that said catalyzing agent is used in a ratio of 1:10 by volume (one part of composition per 10 parts of resin).

12. The use as claimed in one of claims 9 to 11, characterized in that said resin additionally comprises at least one other element chosen from an elastomeric block copolymer comprising styrene and isoprene, an elastomeric block copolymer comprising styrene and butadiene or ethylene, an elastomer, an acrylate ester monomer in which the alcohol part exhibits at least one linear chain of at least 6 carbon atoms, a polymerization accelerator, a rheological agent, an adhesion promoter, an acid monomer, particles formed of a thermoplastic shell and of an elastomeric core (acrylonitrile/butadiene/styrene, methacrylate/butadiene/styrene, methacrylate/acrylonitrile/butadiene/styrene or methacrylate/acrylonitrile particles and the mixtures of these).

13. The use as claimed in one of claims 9 to 12 for promoting the adhesion of parts to composites, in particular RTM (resin transfer molded) composites.

Claims

1. A polymerization-catalyzing agent, which can be used in a structural adhesive and which is intended to be added to a resin comprising monomer agents in order to initiate the polymerization thereof, comprising a free radical polymerization initiating agent and an epoxidized silane, characterized in that said epoxidized silane is between 1 and 30% by weight therein.

2. The Catalyzing agent as claimed in claim 1, characterized in that said epoxidized silane is between 5 and 20% by weight therein.

3. The polymerization-catalyzing agent as claimed in claim 1 or claim 2, characterized in that it does not comprise a plasticizing agent or in that it comprises at most 20% (by weight) of plasticizing agent.

4. The polymerization-catalyzing agent as claimed in any one of claims 1 to 3, characterized in that the free radical polymerization initiating agent is a peroxide.

5. The polymerization-catalyzing agent as claimed in claim 4, characterized in that said peroxide is benzoyl peroxide.

6. The polymerization-catalyzing agent as claimed in any one of claims 1 to 5, characterized in that it comprises between 5 and 40% by weight of polymerization initiating agent.

7. The polymerization-catalyzing agent as claimed in any one of claims 1 to 6, characterized in that it comprises between 10 and 20% by weight of

polymerization initiating agent.

8. The polymerization-catalyzing agent as claimed in any one of claims 1 to 7, characterized in that it additionally comprises an epoxide resin.

9. The polymerization-catalyzing agent as claimed in any one of claims 1 to 8, characterized in that it additionally comprises inorganic fillers.

10. A use of the polymerization-catalyzing agent as claimed in any one of claims 1 to 9 for initiating the polymerization of a (meth)acrylic resin.

11. The use as claimed in claim 10, characterized in that said polymerization-catalyzing agent is used in a ratio 1:1 to 1:30 (by volume) with respect to said resin.

12. The use as claimed in claim 10, characterized in that said polymerization-catalyzing agent is used in a ratio of 1:10 by volume (one part of composition per 10 parts of resin).

13. The use as claimed in any one of claims 10 to 12, characterized in that said resin additionally comprises at least one other element chosen from an elastomeric block copolymer comprising styrene and isoprene, an elastomeric block copolymer comprising styrene and butadiene or ethylene, an elastomer, an acrylate ester monomer in which the alcohol part exhibits at least one linear chain of at least 6 carbon atoms, a polymerization accelerator, a rheological agent, an adhesion promoter, an acid monomer, particles formed of a thermoplastic shell and of an elastomeric core (acrylonitrile/butadiene/styrene, methacrylate/butadiene/styrene, methacrylate/acrylonitrile/

butadiene/styrene or methacrylate/acrylonitrile particles and the mixtures of these).

14. The use according to any one of Claims 10 to 13 for promoting the adhesion of parts to composites

15. The use according to Claim 14, characterized in that said composites are chosen from the group consisting of RTMs (Resin Transfer Molded), SMCs(Sheet Molded Compounds) and pultrudates.

16. A two-component adhesive, comprising
a) the polymerization-catalyzing agent according to any one of claims 1 to 9
b) a (meth)acrylic resin containing (meth)acrylic monomers that polymerize upon addition of the polymerization-catalyzing of a).

17. The two component adhesive according to claim 16, characterized in that said resin additionally comprises at least one other element chosen from an elastomeric block copolymer comprising styrene and isoprene, an elastomeric block copolymer comprising styrene and butadiene or ethylene, an elastomer, an acrylate ester monomer in which the alcohol part exhibits at least one linear chain of at least 6 carbon atoms, a polymerization accelerator, a rheological agent, an adhesion promoter, an acid monomer, particles formed of a thermoplastic shell and of an elastomeric core (acrylonitrile/butadiene/styrene, methacrylate/ butadiene/styrene, methacrylate/acrylonitrile/ butadiene/styrene or methacrylate/acrylonitrile particles and the mixtures of these).

18. A cartridge comprising
a) a compartment containing a (meth)acrylic resin containing (meth)acrylic monomers and

b) another compartment containing the polymerization-catalyzing agent according to any one of claims 1 to 9.