Claims

1. Process for preparing glycerol carbonate (meth)acrylate by transesterification of methyl (meth)acrylate with glycerol carbonate in the presence of a zirconium acetylacetonate catalyst, ~~characterized in that~~**wherein**
the catalyst is pretreated with 2% by weight to 25% by weight of water, based on the amount of catalyst.

2. Process according to Claim 1, ~~characterized in that~~**wherein**
the catalyst is pretreated with 8% by weight to 20% by weight of water, preferably with 9% by weight to 18% by weight of water, in each case based on the amount of catalyst.

3. Process according to either of the preceding claims, ~~characterized in that~~**wherein**
the pretreatment of the catalyst with water takes place in the presence of methyl (meth)acrylate and optionally in the presence of at least one stabilizer.

4. Process according to any of the preceding claims, ~~characterized in that~~**wherein**
the pretreatment of the catalyst with water takes place within a temperature range of between 70°C and 110°C.

5. Process according to any of the preceding claims, ~~characterized in that~~**wherein**
a dewatering step is carried out before the start of the transesterification.

6. Process according to any of the preceding claims, ~~characterized in that~~**wherein**
the catalyst is used in amounts of 1.0% to 5.0% by weight based on the total weight of the mixture.

7. Process according to any of the preceding claims, ~~characterized in that~~**wherein**
the ratio of glycerol carbonate to methyl (meth)acrylate in the reaction mixture is set at a ratio of between 1:6 and 1:12.

8. Process according to any of the preceding claims,
~~characterized in that~~wherein
the ratio of glycerol carbonate to methyl (meth)acrylate in the reaction mixture is set at 1:10.

9. Process according to any of the preceding claims,
~~characterized in that~~wherein
the ratio of glycerol carbonate to methyl (meth)acrylate in the reaction mixture is set at 1:6.

10. Process according to any of the preceding claims,
~~characterized in that~~wherein
methanol formed during the transesterification is distilled off with methyl (meth)acrylate as an azeotrope and methyl (meth)acrylate is continuously added to the reaction mixture in an amount that corresponds to 0.7 to 1.3 times the azeotropic distillate.

11. Process according to any of the preceding claims,
~~characterized in that~~wherein
methanol formed during the transesterification is distilled off with methyl (meth)acrylate as an azeotrope and methyl (meth)acrylate is continuously added to the reaction mixture in an amount equivalent to the azeotropic distillate.

12. Process according to any of the preceding claims,
~~characterized in that~~wherein
the reaction mixture contains at least one stabilizer.

13. Process according to any of the preceding claims,
~~characterized in that~~wherein
the reaction mixture has a stabilizer content of 0.005% to 0.5% by weight.

14. Process according to any of the preceding claims,
~~characterized in that~~wherein
at least one hydroquinone-based polymerization inhibitor is present during the transesterification, optionally in combination with dissolved oxygen.

15. Process according to Claim 14,
~~characterized in that~~wherein
the at least one hydroquinone-based polymerization inhibitor is hydroquinone monomethyl ether (HQME).