

Claims

1. A method for producing glycerol mono(meth)acrylate, **characterized in that** 2,2-dimethyl-1,3-dioxolan-4-yl methyl (meth)acrylate is reacted with methanol in the presence of an acidic silicate catalyst.
2. Method according to Claim 1, **characterized in that** the silicate is a sheet silicate or a mixture of sheet silicates.
3. Method according to Claim 2, **characterized in that** the sheet silicate or the mixture of sheet silicates have a specific surface area greater than 50 m²/g, preferably greater than 220 m²/g and particularly preferably greater than 320 m²/g.
4. Method according to Claim 2 or according to Claim 3, **characterized in that** the sheet silicate or the mixture of sheet silicates is selected from the group consisting of montmorillonite, kaolinite, hectorite, halloysite and bentonite.
5. Method according to any of Claims 2 to 4, **characterized in that** the sheet silicate or the mixture of sheet silicates is montmorillonite or bentonite.
6. Method according to any one of the preceding claims, **characterized in that** the reaction is performed in anhydrous manner and in that the product is anhydrous glycerol mono(meth)acrylate.
7. Method according to any of the preceding claims, **characterized in that** the acidic catalyst is used in an amount from 1% by weight to 15% by weight, based on the reaction batch.
8. Method according to any of the preceding claims, **characterized in that** at least one stabilizer is used selected from the group consisting of octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate, phenothiazine, hydroquinone, hydroquinone monomethyl ether, 4-hydroxy-2,2,6,6-tetramethylpiperidinoxyl (TEMPOL), 2,4-dimethyl-6-tert-butylphenol, 2,6-di-tert-butylphenol, 2,6-di-tert-butyl-4-methylphenol, para-substituted phenylenediamines such as for example N,N'-diphenyl-p-phenylenediamine, 1,4-benzoquinone, 2,6-di-tert-butyl-alpha-(dimethylamino)-p-cresol, 2,5-di-tert-butylhydroquinone.
9. Method according to Claim 8, **characterized in that** the total amount of stabilizers used is between 0.001% by weight and 0.5% by weight.

10. Method according to either of Claims 8 and 9, **characterized in that** the stabilizers hydroquinone monomethyl ether and hydroxy-2,2,6,6-tetramethylpiperidinoxyl (TEMPOL) are used in combination.
- 5 11. Method according to Claim 10, **characterized in that** the ratio of hydroquinone monomethyl ether to TEMPOL is in the range between 10:1 and 4:1.
12. Method according to any of the preceding claims, **characterized in that** the reaction temperature is between 20°C and 80°C.
- 10 13. Method according to Claim 12, **characterized in that** the reaction temperature is between 40°C and 70°C.
14. Glycerol mono(meth)acrylate having a content of glycerol di(meth)acrylate of less than 1 % and
- 15 a content of glycerol of less than 1 %.