We claim:

1. A process for preparing a polyether alcohol d1) by reaction of a) at least one compound having at least three hydrogen atoms reactive with alkylene oxides and a molecular weight Mn of not more than 600 g/mol with b) an alkylene oxide by using c) a catalyst, wherein said reaction is carried out in the presence of a polyether alcohol d) having a hydroxyl number of 100-800 mg KOH/g and a functionality of 1.5 to 8
   i) wherein the polyether alcohol d)) is used is preferably 1-70% by weight all based on the sum total of compounds a) and d); and
   ii) the stirring energy input is from 0.3 kW/m^3 to 2.0 kW/m^3

2. The process according to claim 1 wherein said polyether alcohol d) is used in an amount of 1-70% by weight based on the sum total of said compounds a) and d).

3. The process according to claim 1 wherein alkylene oxide is metered at an average metering rate based on the reactor volume of 45 kg/h/m^3 to 160 kg/h/m^3.

4. The process according to claim 1 wherein the stirring energy input is in the range from 0.15 kW/m^3 to 5 kW/m^3.

5. The process according to claim 1 wherein said polyether alcohol d1) is prepared using the same alkylene oxide b) and the same compound having at least three hydrogen atoms reactive with alkylene oxides a) both in the same amount as in the preparation of said polyether alcohol d).

6. The process according to claim 1 wherein said alkylene oxide b) comprises propylene oxide, ethylene oxide, butylene oxide, isobutylene oxide, styrene oxide and mixtures of two or more thereof.

7. The process according to claim 1 wherein component a) comprises alcohols having at least three hydroxyl groups.

8. The process according to claim 1 wherein said component a) comprises at least one sugar alcohol.

9. The process according to claim 1 wherein said component a) is a mixture of at least one room temperature solid alcohol and at least one room temperature liquid alcohol.

10. The process according to claim 1 wherein component a) comprises amines having at least two amino groups.

11. The process according to claim 1 wherein catalyst c) comprises an amine.

12. The process according to claim 1 wherein said catalyst c) is an amine selected from the group comprising trialkylamines, more particularly trimethylamine, triethylamine, tripropylamine, tributylamine, dimethylalkylamines, more particularly dimethylethanolamine, dimethylcyclohexylamine, dimethylethylamine, dimethylbutylamine, aromatic amines, more particularly dimethylaniline, dimethylaminopyridine, dimethylbenzylamine, pyridine, imidazoles (more particularly imidazole, N-methylimidazole, 2-methylimidazole, 4-methylimidazole, 5-methylimidazole, 2-ethyl-4-methylimidazole, 2,4-dimethylimidazole, 1-hydroxypropylimidazole, 2,4,5-trimethylimidazole, 2-ethylimidazole, 2-ethyl-4-methylimidazole, N-phenylimidazole, 2-phenylimidazole, 4-phenylimidazole), guanidine, alkylated guanidines (more particularly 1,1,3,3-tetramethylguanidine), 7-methyl-1,5,7-triazabicyclo[4.4.0]dec-5-ene, amidines (more particularly 1,5-diazobicyclo[4.3.0]non-5-ene, 1,5-diazabicyclo[5.4.0]undec-7-ene).

13. The process according to claim 1 wherein said catalyst c) is dimethylethanolamine. The process according to claim 1 wherein the catalyst is imidazole.

14. The process according to claim 1 wherein said catalyst c) is the oxide, hydroxide or alkoxide of an alkali or alkaline earth metal.