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(54) Title: BASE-CATALYZED, LONG CHAIN, ACTIVE POLYETHERS FROM SHORT CHAIN DMC-CATALYZED STARTERS

(57) Abstract: The present invention provides long chain, active polyether polyols which are characterized by a functionality of 2 to 6 and an equivalent weight of 1000 to 2200 Da. These long chain polyethers comprise the alkoxylation product of (1) a starter composition having an equivalent weight of 350 Da or less, with (2) one or more alkylene oxides, in which up to 20% of ethylene oxide may be added as a cap, in the presence of (3) at least one basic catalyst. Suitable starter compositions (1) comprise the alkoxylation product of (a) a low molecular weight polyether having a functionality of 3 and an equivalent weight of less than 350 Da, (b) at least one low molecular weight starter compound comprising glycerin, and (c) propylene oxide or a mixture of propylene oxide and ethylene oxide, in the presence of (d) at least one double metal cyanide catalyst. A process for preparing these long chain polyether polyols is also disclosed.



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