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(54) Title: BATCH PROCESS FOR PREPARING A POLYETHER ALCOHOL USING A DOUBLE METAL CYANIDE CATALYST

(57) Abstract: The invention relates to a batch process for preparing a polyether alcohol P having a hydroxyl number of greater than 115 mg KOH/g by reacting starter compound S₁ and starter compound S₂, which starter compounds have one active hydrogen atom or a plurality of active hydrogen atoms, with one or more alkylene oxides in the presence of a composite metal cyanide complex catalyst, comprising a) forming a starter mixture comprising starter compound S₁ and the catalyst and activating the catalyst by adding more than 10 wt.% of an alkylene oxide, based on the weight of the starter mixture before adding the alkylene oxide, followed by b) continuously adding an alkylene oxide; and c) continuously adding starter compound S₂; wherein starter compound S₁ has (I) a nominal functionality which equals the nominal functionality of polyether alcohol P and a hydroxyl number which is within 10% of the hydroxyl number of polyether alcohol P and/or (II) an equivalent weight of from 10 to 10,000 g/mol; starter compound S₂ has an equivalent weight of from 10 to 300 g/mol; no alkylene oxide is added between steps a) and b), and the continuous addition of alkylene oxide in step b) is not interrupted before the total weight of alkylene oxide needed to prepare polyether alcohol P has been added.



WO 2024/184124 A1