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

(57) **Abstract:** The invention relates to a batch process for preparing a polyether polyol P having a hydroxyl number of greater than 115 mg KOH/g by reacting starter compound S1 and optionally starter compound S2, which starter compounds have 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, followed by b) continuously adding an alkylene oxide; and c) optionally: continuously adding starter compound S2; wherein starter compound S1 has (I) a nominal functionality which equals the nominal functionality of polyether polyol P and a hydroxyl number which is within 10% of the hydroxyl number of polyether polyol P and/or (II) an equivalent weight of from 10 to 500 g/mol; optional starter compound S2 has an equivalent weight of from 10 to 70 g/mol; and no alkylene oxide is added in step a) or 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 polyol P has been added.

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