

Preparation of polytetrahydrofuran

5 Abstract

Polytetrahydrofuran, copolymers of tetrahydrofuran and 2-butyne-1,4-diol, diesters of these polymers with C₂-C₂₀-monocarboxylic acids or monoesters of these polymers with C₁-C₁₀-monocarboxylic acids are prepared by polymerization of tetrahydrofuran in the presence of one of the telogens water, 1,4-butanediol, 2-butyne-1,4-diol, polytetrahydrofuran having a molecular weight of from 200 to 700 Dalton, a C₁-C₁₀-monocarboxylic acid or an anhydride of a C₂-C₂₀-monocarboxylic acid or a mixture of these telogens over a heterogeneous supported catalyst which comprises a catalytically active amount of an oxygen-containing molybdenum and/or tungsten compound on an oxidic support material and which has been calcined at from 500°C to 1000°C after application of the precursor compounds of the oxygen-containing molybdenum and/or tungsten compounds onto the support material precursor, wherein the catalyst is activated by treatment with a reducing agent before it is used as a polymerization catalyst.

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