

Title (en)

REMOVAL OF THIOCARBONYL END GROUPS OF POLYMERS

Title (de)

ENTFERNUNG VON THIOCARBONYLENDGRUPPEN VON POLYMEREN

Title (fr)

ELIMINATION DE GROUPES TERMINAUX THIOCARBONYLE DE POLYMERES

Publication

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Application

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Abstract (en)

[origin: WO2004089994A1] This invention provides a method for removing unwanted groups from a chain end of a polymer and replacing them with a more desirable group. In one aspect, the invention provides a method of free radical polymerization. The method includes forming a mixture of one or more monomers, at least one free radical source and a chain transfer agent, wherein the chain transfer agent includes a thiocarbonylthio group, and subjecting the mixture to polymerization conditions. The resulting polymer, which has one or more thiocarbonylthio end groups, is then contacted with a free radical source and optionally an addition fragmentation agent or a monomer with little or no homopolymerizability under cleavage reaction conditions. The free radical source is activated to generate radicals, and at least 50% of the thio end groups of the polymer are replaced with a group of interest other than hydrogen.

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