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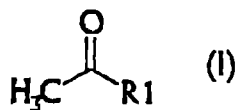


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(54) Title: NONODOROUS ETHYLENE HOMOPOLYMERS AND COPOLYMERS HAVING GOOD MECHANICAL PROPERTIES

(54) Bezeichnung: GERUCHLOSE ETHYLENHOMO- UND COPOLYMERE MIT GUTEN MECHANISCHEN EIGENSCHAFTEN



(57) Abstract: The invention relates to a method for producing ethylene homopolymers and copolymers in a tubular reactor having at least two polymerisation zones, at temperatures of between 150 °C and 350 °C and pressures of between 500 and 5000 bar, using oxygen as an initiator. Said method is characterised in that at least one aliphatic ketone of general formula (I) is used as a molar mass regulator. The variable R¹ in formula (I) represents a C₁-C₆ alkyl or a C₃-C₁₂-cycloalkyl. The invention also relates to ethylene homopolymers and copolymers that can be obtained using the inventive method and the use of the same for producing injection-moulded products in the fields of cosmetics, medicine and food.

(57) Zusammenfassung: Verfahren zur Herstellung von Ethylenhomopolymeren und -copolymeren in einem Rohrreaktor mit zwei oder mehr Polymerisationszonen bei Temperaturen von 150 °C bis 350 °C und Drücken im Bereich von 500 bis 5000 bar unter Verwendung von Sauerstoff als Initiator, dadurch gekennzeichnet, dass man als Molmassenregler ein oder mehrere aliphatische Ketone der allgemeinen Formeln I verwendet, worin die Variable R¹ ein C₁-C₆-Alkyl oder C₃-C₁₂-Cycloalkyl ist, daraus erhaltene Ethylenhomo- und copolymere und deren Verwendung zur Darstellung von Spritzgussprodukten im Kosmetik-, Medizin- und Lebensmittelbereich.

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