

ABSTRACT

PROCESS FOR FORMING POLYALKENYL ACYLATING AGENTS

5 A process for producing polyalkenyl acylating agent, wherein, upon completion of the thermal reaction of a polyalkene and an unsaturated mono- or dicarboxylic acid or anhydride compound, the reaction mixture is allowed to cool to below the reaction temperature, an additional amount of unsaturated mono- or dicarboxylic acid or anhydride compound is added to the cooled reaction mixture, which is then maintained in the reactor for a time period, optionally with agitation. Reducing the temperature of the reaction mixture prior to the introduction of
10 additional unsaturated mono- or dicarboxylic acid or anhydride compound minimizes further reaction between the additional unsaturated mono- or dicarboxylic acid or anhydride compound and any remaining unreacted polyalkene, as well as self-polymerization of the unsaturated mono- or dicarboxylic acid or anhydride compound. Polymerized unsaturated mono- or dicarboxylic acid or anhydride compound in the reactor, suspended in the reaction mixture in the form of
15 sediment or deposited on the internal walls of the reactor vessel as tar, is dissolved by the additional unsaturated mono- or dicarboxylic acid or anhydride compound and removed from the reactor upon draining of the reactor vessel.