

PROCESS FOR FLUID PHASE IN-LINE BLENDING OF POLYMERS

Abstract

A process for fluid phase in-line blending of polymers. The process includes providing two or more reactor trains configured in parallel and a separator for product blending and product-feed separation; contacting in at least one of the parallel reactor trains olefin monomers having three or more carbon atoms, catalyst systems, optional comonomers, optional scavengers, and optional inert diluents or inert solvents, at a temperature above the solid-fluid phase transition temperature of the polymerization system and a pressure no lower than 10 MPa below the cloud point pressure of the polymerization system and less than 1500 MPa; forming a reactor effluent including a homogeneous fluid phase polymer-monomer mixture in each parallel reactor train; combining the reactor effluent from each parallel reactor; and passing the combined reactor effluent through the separator.

Figure 6