

ELASTOMERIC REACTOR BLEND COMPOSITIONS

Abstract

Disclosed herein are various processes, including but not limited to a continuous process for making an elastomer composition having a Mooney Viscosity (ML (1+4) @ 125 °C) of from 16 to 180, the composition including a first polymer and a second polymer, the process comprising: polymerizing a first monomer system that includes propylene and one or both of ethylene and propylene in a solvent using a first catalyst system in a first polymerization zone to provide a first polymer, having 60 wt% or more units derived from propylene, including isotactically-arranged propylene-derived sequences and further having a heat of fusion less than 45 J/g or a melting point less than 105 °C or both and a Mooney Viscosity (ML (1+4) @ 125 °C) of from 1 to 45; polymerizing a second monomer system that includes ethylene or an alpha-olefin, or both, in a solvent using a second catalyst system in a second polymerization zone to provide a second polymer which is an elastomeric polymer that is either non-crystalline or has ethylene-derived crystallinity; combining the first polymer and the second polymer in a mixture that includes solvent and unreacted monomer; and removing solvent from the mixture to provide an elastomer composition that having a Mooney Viscosity (ML (1+4) @ 125 °C) of from 16 to 180.

Figure 1