

[Name of the Document] Abstract

A method for producing styrene-modified polyethylene-based resin beads, including the steps of:

- 5 dispersing 100 parts by weight of polyethylene-based resin beads which contain an inorganic nucleating agent and have a melting point of 95°C to 115°C, 20 parts by weight or more and less than 300 parts by weight of a styrene-based monomer and a polymerization initiator into an aqueous suspension
- 10 containing a dispersant; impregnating the polyethylene-based resin beads with the styrene-based monomer under heating the resulting dispersion at such a temperature that the styrene-based monomer does not substantially polymerize; and
- 15 performing polymerization of the styrene-based monomer at a temperature of (T)°C to (T+25)°C (where T°C is a melting point of the polyethylene-based resin beads.)