

Method For The Preparation Of A Poly(Arylene Ether), And Related Compositions

Abstract

A method for preparing a poly(arylene ether) with a reduced level of powder fines is described. In one embodiment, the method comprises oxidatively coupling a monohydric phenol in the presence of a solvent and a complex metal catalyst, to produce a poly(arylene ether) resin; and then removing a portion of the solvent to produce a concentrated solution having a cloud point T_{cloud} . The concentrated solution is then combined with an anti-solvent to precipitate the poly(arylene ether) in the form of a precipitation mixture. The concentrated solution usually has a temperature of at least about $(T_{cloud} - 10^{\circ}\text{C})$ immediately before it is combined with the anti-solvent. The precipitation mixture has a temperature of at least about: $(T_{cloud} - 40^{\circ}\text{C})$ after its formation. Related poly(arylene ether) copolymers are also described.

No suitable figure.