

Abstract

The invention belongs to the field of polymers, and relates to an anhydride group-containing polypropylene graft for an insulating material and preparation method thereof. The anhydride group-containing polypropylene graft comprises structural units derived from a polypropylene copolymer, structural units derived from an anhydride monomer and structural units derived from an alkenyl-containing polymerizable monomer; the content of the structural units derived from the anhydride monomer and the alkenyl-containing polymerizable monomer and in a grafted state in the anhydride group-containing polypropylene graft is 0.1 to 5 wt%, based on the weight of the anhydride group-containing polypropylene graft; and, the molar ratio of the structural units derived from the anhydride monomer to the structural units derived from the alkenyl-containing polymerizable monomer in the anhydride group-containing polypropylene graft is 1: 1-20; the polypropylene copolymer has at least one of the following characteristics: the comonomer content is 0.5 to 40 mol%; the content of xylene solubles is 2 to 80 wt%; the comonomer content in the xylene solubles is 10 to 70 wt%; the intrinsic viscosity ratio of the xylene solubles to the polypropylene copolymer is 0.3 to 5. The anhydride group-containing polypropylene graft of the invention can give consideration to both mechanical property and electrical property at a higher working temperature.

[Figure 1]