

ABSTRACT

The present invention aims to provide a separator for batteries that achieves both adhesiveness to electrodes and low thermal shrinkage, which have been conventionally difficult to be compatible with each other, and has excellent ion permeability in order to further improve the safety of the separator, on the assumption that lithium ion secondary batteries are widely used for electric automobiles and the like, which require the batteries to withstand severe operating conditions. The separator for batteries is configured such that a modified porous layer containing a fluoro-resin and inorganic particles is laminated on at least one side of a porous membrane formed of a polyolefin resin. The content of the particles is equal to or more than 40% by volume and less than 70% volume with respect to the total of the fluoro-resin and the particles. The fluoro-resin has a crystallinity of equal to or more than 36% and less than 70%.