COATING SLURRY, SEPARATOR, METHOD FOR PREPARING SEPARATOR, AND BATTERY

ABSTRACT

The present application provides a coating slurry, a separator, a method for preparing the separator, and a battery. The separator includes a substrate and a coating layer provided on at least one surface of the substrate, where the coating layer includes fluorine-free polymer microspheres and a fluorine-free binder, a mass ratio of the fluorine-free polymer microspheres to the fluorine-free binder is (1 to 18):1, a melting point of the fluorine-free polymer microspheres is denoted as T, a glass transition temperature of the fluorine-free binder is denoted as Tg, and T and Tg satisfy the following relationship: $30 \leq |T + Tg| \leq 190$. The separator is capable of achieving relatively low-temperature pressing with positive and negative electrode sheets, and the separator exhibits high adhesion to the positive and negative electrode sheets, excellent interfacial bonding performance, as well as good air permeability, thermal stability, and resistance to electrolyte-injection-induced wrinkling.

Fig 1.