

ABSTRACT

A safety coating and use thereof, an electrode sheet, and a lithium-ion battery are disclosed, which relates to the technical field of secondary battery materials. By limiting the particle size of the inorganic filler, a well-graded distribution of large and small particles is achieved, resulting in a relatively dense structure for the safety coating, thereby reducing the probability of contact between the positive electrode and the negative electrode, and enhancing the safety performance of the battery cell. Meanwhile, by optimizing the content of binder in the safety coating, the electrolytic solution absorption by the safety coating is promoted, which can improve the rate performance, low-temperature discharge performance, and cycling performance of the battery cell. Ultimately, by limiting the particle size of the inorganic filler and selecting the binder, the safety performance of the battery cell can be improved while enhancing its rate performance, low-temperature discharge performance, and cycling performance.