

[Document Name] Abstract

A particle capture filtration film with communication pores formed by anode oxidization of an aluminum material includes a small pore diameter part having communication pores formed to open to one surface of the filtration film, an intermediate pore part having communication pores to which the communication pores of the small pore diameter part are connected and that have a larger diameter than a diameter of the communication pores in the small pore diameter part, and a large pore diameter part having communication pores to which the communication pores of the intermediate pore part are connected and which have a larger diameter than a diameter of the communication pores in the intermediate pore part and are formed to open to the other surface of the filtration film, wherein the small pore diameter part is provided with the communication pores formed from the one surface of the filtration film to a position of at least 400 nm, the communication pores having an average pore diameter of 4 to 20 nm, a total film thickness of the filtration film is equal to or less than 50 μm , and the communication pores of the large pore diameter part have a large pore diameter part narrow portion in the intermediate pore part side.

The present invention can provide the particle capture filtration film with the communication pores formed by the anode oxidization and having the average

pore diameter smaller than conventional and being difficult to be damaged at the liquid passing of the measurement object, and the manufacturing method thereof.