

ABSTRACT

REMOVAL OF MICROORGANISMS FROM FLUID SAMPLES USING NANOFIBER FILTRATION MEDIA

A method for removing microorganisms from liquid samples and a nanofiber containing liquid filtration medium that simultaneously exhibits high liquid permeability and high microorganism retention. Microorganisms such as bacteria, particularly *B. Diminuta*, are removed from a liquid by passing the liquid through a porous nanofiber containing filtration medium having a *B. Diminuta* LRV greater than about 9, and the nanofiber(s) has a diameter from about 10 nm to about 1,000 nm. Another method for removing microorganisms such as bacteria and *Mycoplasma*, includes passing the liquid through a porous nanofiber containing filtration medium having a microorganism LRV greater than about 8, and the nanofiber(s) has a diameter from about 10 nm to about 1,000 nm. The filtration medium can be in the form of a fibrous electrospun polymeric nanofiber liquid filtration medium mat.

(Fig. 1)