

## ABSTRACT

It is an object of the present invention to provide a composite semipermeable membrane having an excellent  
5 resistance property to contamination, particularly an excellent resistance property to microbial contamination, and a water treatment method using the composite semipermeable membrane. The present invention relates to a composite semipermeable membrane comprising a skin layer formed on the  
10 surface of a porous support and containing a polyamide-based resin obtained by reacting a polyfunctional amine component with a polyfunctional acid halide component, wherein an antibacterial layer containing a silver-based antibacterial agent and a polymer component is formed on the skin layer  
15 directly or with other layer interposed therebetween, and the weight ratio between the silver-based antibacterial agent and the polymer component in the antibacterial layer is 55:45 to 95:5 (silver-based antibacterial agent:polymer component).