

ABSTRACT

SELF-WETTING POROUS MEMBRANES (I)

Disclosed is a self-wetting porous membrane comprising an aromatic hydrophobic polymer such as polysulfone and a wetting agent comprising a copolymer of formula A-B or A-B-A, wherein A is a hydrophilic segment comprising a polymerized monomer of the formula (I): $\text{CH}_2=\text{C}(\text{R}^1)(\text{R}^2)$, wherein R^1 and R^2 are as described herein, and B is an aromatic hydrophobic polymeric segment, wherein segments B and A are linked through an amidoalkylthio group. Also disclosed is a method of preparing a self-wetting membrane comprising casting a solution containing an aromatic hydrophobic polymer and the wetting agent, followed by subjecting the cast solution to phase inversion. The self-wetting porous membrane finds use in hemodialysis, microfiltration, and ultrafiltration.

(Figure 1)