CLAIMS

What is claimed is:

1. A porous membrane comprising poly(tetrafluoroethylene), wherein:
   a) the membrane is at least partially coated with a polymer prepared from the free radical reaction of ethylenically-unsaturated monomers, wherein the monomers are comprised of monomers having an amide moiety;

   b) the membrane exhibits a wettability of at least about 80 Dynes/cm; and
   c) the membrane exhibits a 60% isopropanol visual bubble point of greater than about 21psi.

2. The porous membrane of claim 1, wherein the membrane exhibits a deionized water flow time of about 200 to about 400 seconds, per 500ml.
3. The porous membrane of claim 1, wherein the mean pore size of the membrane is about 0.1 µm to about 0.2 µm.
4. The porous membrane of claim 1, wherein the mean pore size of the membrane is about 0.15 µm to about 0.22 µm.
5. The porous membrane of claim 1, wherein the membrane exhibits a wettability of about 82 to about 89 Dynes/cm.
6. The porous membrane of claim 1, wherein the coating has an amide density (AD) of about 0.008 to about 0.014.
7. The porous membrane of claim 6, wherein the coating has an amide density (AD) of about 0.010 to about 0.013.
8. The porous membrane of claim 1, wherein the monomers having an amide moiety are selected from the group consisting of ethyl acrylamide, butyl acrylamide, N, N-dimethylaminopropyl methacrylamide, acrylamide, methacrylamide, ethyl formamide, N-(2-methoxyacrylamido-ethyl)ethylene urea, N,N-methylenebisacrylamide, dimethylacrylamide, and combinations thereof.
9. The porous membrane of claim 1, wherein the monomers having an amide moiety are selected from the group consisting of N, N-methylenebisacrylamide and dimethylacrylamide, and a combination thereof.
10. The porous membrane of claim 9, wherein the N,N-methylenebisacrylamide and dimethylacrylamide are used in a weight ratio of about 1:1 to about 1:4.

11. The porous membrane of claim 1, wherein at least about 90 mole percent of the monomers possess an amide moiety.
12. A filter comprising the porous membrane of any one of claims 1 to 11.
13. A method for filtering a liquid, which comprises passing the liquid through the porous membrane of any one of claims 1 to 11.
14. The method of claim 13, wherein the liquid comprises one or more of n-butyl acetate, isopropyl alcohol, 2-ethoxyethyl acetate, xylenes, cyclohexanone, ethyl lactate, isopentyl ether, methyl-2-hydroxyisobutyrate, methyl isobutyl carbinol, methyl isobutyl ketone, isoamyl acetate, undecane, propylene glycol methyl ether, propylene glycol monomethyl ether acetate, and a mixed solution of propylene glycol monomethyl ether and propylene glycol monomethyl ether acetate.
15. A method for removing bacteria from a liquid comprising at least one active pharmaceutical ingredient and one or more carriers and/or diluents, the method comprising passing the liquid through the porous membrane of any one of claims 1 to 11.
16. The method of claim 15, wherein the liquid comprises water.
17. The method of claim 16, wherein the liquid further comprises one or more glycols or alcohols.
18. The method of claim 17, wherein the liquid further comprises one or more of propylene glycol, glycerol, C_1-C_4 alcohols, or combinations thereof.
19. The method of claim 18, wherein the liquid comprises water and at least one glycol chosen from propylene glycol and glycerol.