

The CeraGuard UF membrane represents the next generation of affordable residential and commercial water treatment products by providing a “Green” approach in the water treatment marketplace as compared to competitive technologies such as reverse osmosis and ultra violet sterilization.



Features:

- Low operating pressures
- 100% efficient operation dead ended or 98% utilizing back flush
- Excellent filtration performance with high flux
- High chemical resistance and temperature tolerant of oxidants, chlorine, and ozone
- Low nominal molecular weight pore size (0.02 μm)
- High removal efficiency of bacteria and viruses
- Simple, modular design

Low molecular weight cutoff of the membrane prevents bacteria and viruses from passing through the membrane; 6 log and up to 9 log respectively.

Rejection is 99.9999%

This ultra filtration membrane is made of double skinned hollow fibers that provides the element superior strength with a burst pressure greater than 60PSi thereby creating added safety as molecules must pass through 2 identical barriers and a supporting layer between the membrane fibers.

The membrane is made from polyethersulfone (PES), a hydrophilic, chemically stable polymer capable of operating in aggressive environments.

Configuration	Dual Barrier Hollow Fiber
Membrane Characteristics	PES - Hydrophilic Double Skin Type
Pure water permeability	> 180 GFD @ 20 PSI @ 21 °C
Nominal Molecular Weight	100,000 NMW < 0.02 microns
Fiber ID	0.8 mm - 1.4 mm
Outside - In Pattern	
Operating Feed Pressure	0—60 PSI
Back flush Pressure Maximum	Up to 30 PSI
Toleratnce	
Chlorine Maximum	200 ppm @ 11 pH
pH Tolerance	2 to 13
Operating Temperature	120 ° F
Back flush Chlorine	10 ppm maximum
CIP pressure	30 PSI

- Turbidity Challenge: <0.18 NTU after challenge water containing 2, 5, and 10 NTU
- Cryptosporidium Removal: 9 log removal using surrogate test procedure 99.9999999%
- E.Coli/Bacteria Removal: 6 log removal of E. coli 99.9999%
- Virus Removal: 5 log removal (MS2 bacteriophage test) 99.999%
- Average pore size 0.02 micron
- PolyEtherSulfone— Hydrophilic Double-Skin Type membrane material
- 400 Fibers per Module
- Surface Area 2.48 square feet
- Operating Pressure 60 psi
- NMW 100,000 < 0.02 micron