



ULTRA~E™

SUBMICRON DEPTH FILTRATION

The **ULTRA-E Submicron Depth Filtration Series** manufactured using a proprietary, patented, electroadsorptive media technology, are capable of **removing submicron pathogens and inorganic contaminants through electro-adhesion and ion exchange**. This technology makes it possible for a nonwoven media to produce filtration efficiency comparable to ultra membrane filtration but at very low pressure drop, with high flow rates and high loading capacity working equally well in fresh, brackish or salt waters.



The **ULTRA-E** media consists of coated micro-glass fibers produced using a wet laid nonwoven manufacturing technology. The base media is laminated between layers of spun-bond to provide both strength and pleat support. The media in the **ULTRA-E** filter is NSF 61-approved (Drinking) Water System Components - Health Effects), and -USP Class VI testing and endotoxin testing.



(Turn over for benefits and features of ULTRA-E)



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The ULTRA-E filter reduces or removes the following pathogens:

- >99.99% viruses (polio, rotavirus, norovirus, etc.)**
- >99.99% bacteria (e coli, legionella, pseudomonas, etc.)**
- >99.95% cists (giardia, cryptosporidium, etc.)**

**Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

The ULTRA-E filter removes or reduces the following heavy metals:

- >95% Lead**
- >90% Ferrous Iron **
- >95% Arsenic V**
- >95% Cadmium **
- >85% Chromium**
- >75% Selenium **
- >60% Mercury

**Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

The ULTRA-E filter removes or reduces the following organics and inorganic chemicals:

- VOCs (volatile organic compounds)
- PCBs and BPA
- Residual pharmaceuticals
- Biotouling precursors: organic acids, proteins, polysaccharides

Applications for and industries benefitting from the ULTRA-E filtration process:

- Residential use where cost effective systems must be used and presence of pathogenic-laden water is of ongoing concern
- Food and beverage industry for high purity water
- Pharmaceutical industry for high purity water
- Commercial pre-RO and ultra filtration treatment to sustain the life of the membranes
- Greywater recycling for removal of pathogens
- De-salination for pre-filtration
- Other high purity applications
- Water re-cycling treatment for circuit board industry

Benefits using the ULTRA-E Filter Cartridges versus other medias:

- Finer particle retention and filtration capacity (2 to 3-micron pore size comparable to a 0.05-micron size for virus removal)
- Higher loading capacity (up to 25 times greater)
- Greater efficiency in salt, brackish and fresh water
- Wider pH operating window (4-9pH)
- Very low pressure drop (approximately 2 psi)
- Lower cost of awneship
- The capability of using one stand-alone filter system to achieve pathogen, heavy metal, chemical and organics removal or reduction.

- Initial Set Cost \$70.⁰⁰
- Replacement Filter \$50.⁰⁰
- Replacement Housing \$25.⁰⁰

1500 gallons