



## **Can I use Deionized Water rather than Distilled Water?**

De-ionized and distilled water are very similar, they both remove impurities from the original source producing the purest form of water that can be utilized a number of ways. In order to obtain the purest form of either, one would need to start with Reverse Osmosis water that has already been processed and purified.

Aqua Chill offers de-ionized water for medical offices and labs that require a grade one water. Aqua Chill pre-treats the water with reverse osmosis and uses a non-regenerable industrial and general-purpose deionization polishing cartridge designed to give multi meg-ohm quality water for analytical and general laboratory use. The cartridge is constructed from FDA material and media and is designed as a polisher for low TDS feed water. This water is equivalent to the bottled water labeled for distilled water uses, prepared by reverse osmosis and de-ionization. This can be utilized in a number of fields such as:

- Medicine
- Dentistry
- Podiatry
- Veterinary Science
- Hospital/Medical Waste
- Microbiology
- Body Piercing

There are a number of other uses for the Deionized Water outside of the sterilization process such as:

- Humidifiers
- Steamers
- Printing Equipment
- Aquariums
- CNC Machinery
- Auto Batteries
- Germination

With the ability to use Deionized water in a multitude of ways businesses can eliminate the need for bottles of distilled water and implement the Aqua Chill Reverse Osmosis De-ionization Water. In doing so, eliminating the hassle of the bottles, helping the environment by reducing the use of plastic and in most cases reducing cost.

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## AF SERIES

HIGH PURITY DEIONIZATION

### KEY FEATURES

- **RESINTECH® MIXED BED HIGH CAPACITY MEDIA**
- **ABILITY TO PRODUCE RESISTIVITY >18 MEGOHM FOR POLISHING**
- **LTOC RESIN AVAILABLE FOR ULTRA HIGH PURITY APPLICATIONS**

### HIGH PURITY DEIONIZATION CARTRIDGES

Aries FilterWorks cartridges use ResinTech® mixed bed resins to ensure high purity, demineralized water. These resins, combined with the cartridge manufacturing of Aries FilterWorks, provide consistent high purity water quality with the backing of a strict quality control program. Mixed bed resins are available in various grades depending upon the applications requirements. Aside from the standard characteristic of demineralization, resin options include low odor (for humidification), and low TOC (for sensitivity to organics). These cartridges are ideal for processes requiring high purity water for washing, rinsing, scale control, or "final polishing".

### APPLICATIONS

#### COMMERCIAL USE -

Mixed bed deionization cartridges are a great choice for low flow applications that require high purity water. Resins can be matched to specific application needs. Standard resins are used for make up supply, rinsing and washing, cooling loops, battery filling, hydrogen generation, and fuel cell. Low odor resins are preferred on misting and humidification applications while low TOC resins are used in specialty systems where organics can cause interferences.

#### LABORATORY USE -

It is important to effectively match the purification technique to the application. Ultra High Purity water > 18 Megohm is required in most pharmaceutical, research and clinical laboratories. Deionizers are most commonly used when reverse osmosis (RO) alone cannot be relied upon to produce water of acceptable quality. Mixed bed cartridges may be placed downstream of the RO unit, completing the purification process. This quality water is used in making up reagents, preparing buffers, and diluting various solutions.

### ABOUT HIGH PURITY DEIONIZATION

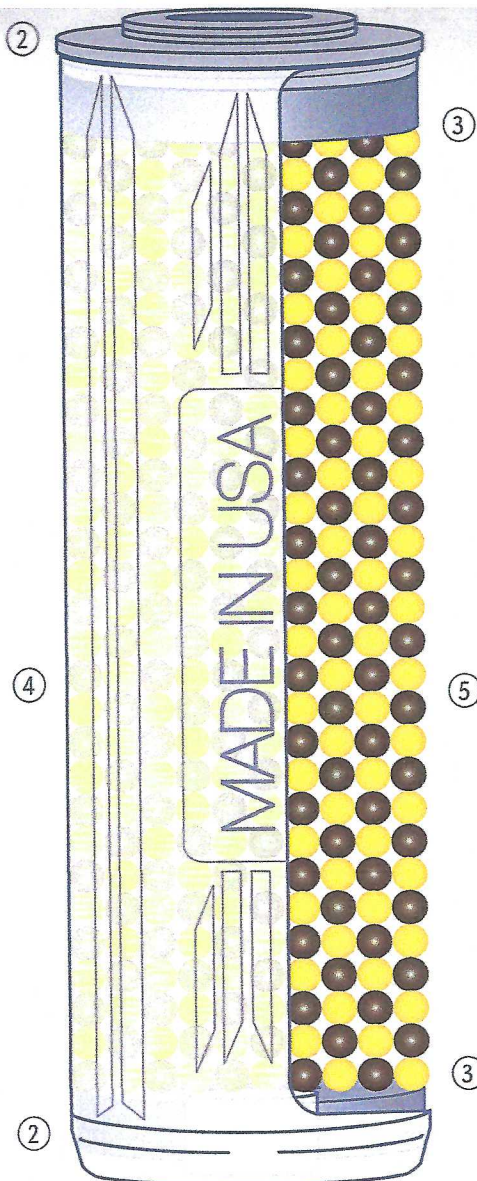
The process used for removal of all dissolved salts from water is referred to as deionization or demineralization. Deionizers (DI) remove both cations and anions, releasing hydrogen ions (H+) in exchange for the former, and hydroxyl ions (OH-) for the latter. The hydrogen and hydroxyl ions subsequently combine to form pure water. Mixed-bed deionizers produce water containing the lowest ionic concentrations. Dual-bed deionizers produce water of lesser quality, generally unacceptable for specialized medical purposes. Custom mixes of almost any kind as well as separate component are used for different applications. These combinations are most useful at the final polishing stage of the effluent.

### FEATURES & BENEFITS

- **PREMIUM MEDIA FOR LONG-LASTING SERVICE LIFE**  
ResinTech® MBD-10 or MBD-20 mixed bed resin with resistivities of 14 -18 MΩ-cm
- **RESIN AND CARTRIDGE MANUFACTURER ALL-IN-ONE**  
Quality is built into every cartridge ensuring user confidence and performance
- **FITS STANDARD RESIDENTIAL AND INDUSTRIAL SIZE HOUSING**  
AF Series cartridges are double-open end cartridges that fit standard residential and industrial housings
- **OVERSIZED CARTRIDGE FOR MAXIMUM MEDIA FILL**  
AF Series cartridges have up to 50% higher capacity and extend cartridge life, due to the use of larger cartridges
- **QUALITY PRODUCED AND MADE IN THE USA**  
Cartridges are produced by Aries FilterWorks, a division of ResinTech®. Strict quality control over all aspects of cartridge and media production allows complete traceability of every filter

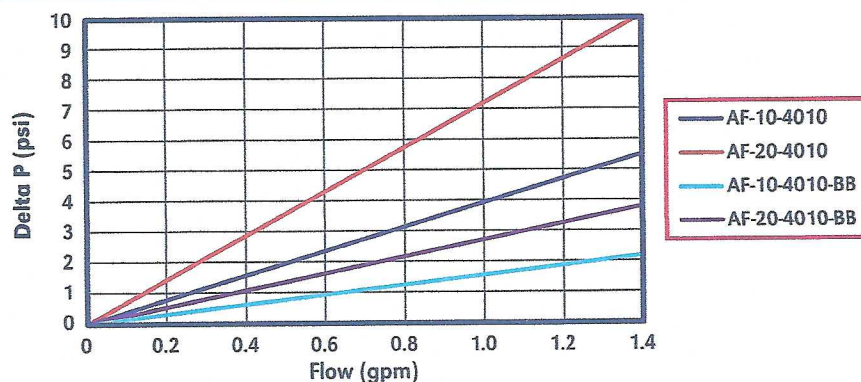






	10" SLIM	20" SLIM	10" SUPER BLUE	20" SUPER BLUE
Diameter (in.)	3.0"	2.9"	4.6"	4.6"
Length (in.)	9.9"	20.0"	10.0"	20.0"
Temperature (°F.)				
Min.	40°	40°	40°	40°
Max	100°	100°	100°	100°
Pressure (psi)				
Min.	20	20	20	20
Max.	125	125	125	125
Micron Rating (μ)	25	25	25	25
Materials of Construction				
1. Gasket	TPE	TPE	TPE	TPE
2. End Caps	PP	ABS	ABS	ABS
3. Pads	PE	PE	PE	PE
4. Body / Tube	PP	ABS	ABS	ABS
5. Media*	ResinTech® Mixed Bed Resin			
PP	Polypropylene		PE	Polyester
ABS	Acrylonitrile Butadiene Styrene		TPE	Thermoplastic Elastomer

### MIXED BED DELTA P



### MEDIA

As a division of ResinTech, Inc., Aries FilterWorks is the only integrated water filtration media or cartridge manufacturer providing a premium product at the most competitive cost. Aries built technology and knowledge of ion exchange and specialty adsorbents into each cartridge. Stringent quality control over all aspects of cartridge production allows complete traceability of every filter.

### ORDERING GUIDE

PART NUMBER	MEDIA	STANDARD HOUSING DIAMETER X LENGTH	FLOW RATE (GPM)		TOTAL CAPACITY* (GRAINS AS CaCO <sub>3</sub> )	ESTIMATED GALLONS		TYPICAL EFFLUENT* (RESISTIVITY)
			OPERATING	MAXIMUM		200 PPM	5 PPM	
AF-10-4010	High-Purity ResinTech® MBD-10-SC Mixed Bed Resin	2.5" x 10"	0.2	0.3	450	33	1,320	14 - 18 MΩ-cm
AF-20-4010		2.5" x 20"	0.2	0.6	900	66	2,640	
AF-10-4010-BB		4.5" x 10"	0.5	0.8	1,050	75	3,000	
AF-20-4010-BB		4.5" x 20"	0.5	1.5	2,350	170	6,800	
AF-10-4011	Ultra High-Purity / LTOC ResinTech® MBD-10-LTOC Mixed Bed Resin	2.5" x 10"	0.2	0.3	450	33	1,320	14 - 18 MΩ-cm
AF-20-4011		2.5" x 20"	0.2	0.6	900	66	2,640	
AF-10-4011-BB		4.5" x 10"	0.5	0.8	1,050	75	3,000	
AF-20-4011-BB		4.5" x 20"	0.5	1.5	2,350	170	6,800	
AF-10-4020	Ultra Purity / Low-Odor ResinTech® MBD-20 Mixed Bed Resin	2.5" x 10"	0.2	0.3	450	33	1,320	>14 MΩ-cm
AF-20-4020		2.5" x 20"	0.2	0.6	900	66	2,640	
AF-10-4020-BB		4.5" x 10"	0.5	0.8	1,050	75	3,000	
AF-20-4020-BB		4.5" x 20"	0.5	1.5	2,350	170	6,800	

\* Through-put based upon capacity. Specific feed contaminants can effect capacity.

\*\* Effluent based upon flow rate and 200 ppm feed water. Specific feed water contaminants can effect effluent water quality.

**Notes: Ordering information subject to change without notice. Please verify all specifications prior to ordering.**

To place an order call (856) 626-1550 or e-mail ariescs@ariesfilterworks.com

#### IMPORTANT NOTICE TO USER:

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