



CHARGER

Water Treatment Products



Point of Entry Water Treatment

Residential & Light Commercial

Adsorption of arsenic, iron manganese, hydrogen sulfide

Adsorption of Arsenic,
Iron Manganese,
Hydrogen Sulfide*



Point of Entry WATER TREATMENT

Packaged
Residential
Systems

Charger POE water treatment removes arsenic using metal-oxide nano-particles that are precipitated within the resin bed where they form very strong chemical bonds with arsenite (As III) and arsenate (As V). *When used with Aldex CR-26 media they also provide excellent removal of iron, manganese and hydrogen sulfide contamination from potable and non-potable aqueous streams.



POE with
Aldex CR-26
Media

Charger POE Systems with Aldex CR-26 Media

Advanced Technology

- Built in flow control
- Easy-to-read LCD screen
- Variable backwashing
- Built in ports for water sampling
- Reliable, high performance operation without chemicals or brine
- Long, useful life
- Economical to operate

Unique Multiple Contaminant Removal

Aldex CR-26 is extraordinary for its ability to remove multiple water contaminants delivering a more complete conditioning of water in a single treatment system.

Potable and Non-potable Water Applications

Aldex CR-26 requires less contact time and is like standard softening resins in bulk density and handling making it an ideal choice for point-of-entry systems. Aldex CR-26 can be backwashed at lower flow rates to achieve ideal bed expansion needed to remove metal oxide precipitates generated during the service cycle. Aldex CR-26 is easy to handle versus other oxidative media and many naturally occurring zeolites.



Aldex Chemical-free Regeneration

The oxidative chemical locked inside Aldex CR-26 beads is regenerated via the dissolved oxygen in the backwash water. This means chemicals such as chlorine dioxide, potassium permanganate, chlorine or sodium chloride brine solution are not needed for regeneration.

Backwash Frequency

Aldex CR-26 can be backwashed at lower flow rates to achieve ideal bed expansion needed to remove metal-oxide precipitates generated during the service cycle. Refer to CR-26 bulletin for backwash flow rates. Daily backwash is recommended.

Easy to Handle

Aldex CR-26 is easy to handle versus other oxidative media and many naturally occurring zeolites.

Expected Service Life

Due to the unique nature of Aldex CR-26 and its function as an oxidizing agent encapsulate within an ion exchange bead, a long service life of 7 to 10 years is expected.

Safe for TCLP After Exhaustion

Once exhausted, Aldex CR-26 media is non-toxic! It passes Toxicity Characteristic Leaching Procedure (TCLP), (EPA test method 1311) and may be disposed of as a non-hazardous material.

Your **Charger** Water
Treatment Dealer:

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WATER TREATMENT SYSTEMS

Adsorption of Arsenic, Iron Manganese, Hydrogen Sulfide

POE WATER TREATMENT COMPARISONS

FEATURE	Anion Exchange	Reverse Osmosis	AdVantEdge Medallion Series AD33 System	Charger POE with Aldex CR-26
Arsenic Removed	As (V)	As (V)	As (V) and As (III)	As (V) and As (III)
Pre-oxidation required	Yes	Yes	No	No
Chemical use	Yes, Salt	Membrane Cleaning	None	None
Water loss (waste)	5%	25-75%	<1%	<1%
Regeneration Frequency	Every 2,000 to 4,000 gal	N/A	Non-regenerable, disposable	Daily Backwash
Hazardous waste generated	Yes	Concentrated arsenic reject	No	No
Off-taste potential	Yes	No	No	No
Maintenance	High	High	Low	Low
Arsenic dumping at media capacity	Possible	N/A	No	No
Water chemistry changes	Lowers pH	Removes TDS	Negligible	No
Relative cost	Moderate	High	Moderate	Low

POE MODEL SPECIFICATIONS

SPECIFICATIONS	6 GPM Model	8 GPM Model	10 GPM Model
System Dimensions	12" W x 52" H fiberglass	13" W x 54" H fiberglass	14" W x 65" H fiberglass
Media Type	Aldex CR-26	Aldex CR-26	Aldex CR-26
Media Quantity	2 cubic feet	2.75 cubic feet	3 cubic feet
Normal Service Flow	4 to 6 gpm	6 to 8 gpm	8 to 10 gpm
Peak Flow Rate	6 gpm	8 gpm	10 gpm
Backwash Max Flow	5 gpm	7 gpm	10 gpm
Backflow Cycle	Automatic Pre-programmed	Automatic Pre-programmed	Automatic Pre-programmed
Temperature Range	33°F to 100°F	33°F to 100°F	33°F to 100°F
Inlet/Outlet	1" dia MPT PVC	1" dia MPT PVC	1" dia MPT PVC
Drain	3/4" connection	3/4" connection	3/4" connection
Underbed Material	Gravel/stone	Gravel/stone	Gravel/stone
Shipping Weight	120 lbs	160 lbs	230 lbs

RECOMMENDED WATER QUALITY

Parameter	All Models
Arsenic Concentration	5 to 500 ppb ^{1,2}
Treatment Goal (typical)	<10 ppb total arsenic ³
Treated Arsenic Types	As (V) and AS (II)
Removal Efficiency	90 to 99% (typical)
Media Life	>5 years, depending on water quality and usage
Media Disposal	Non-hazardous waste landfill ⁵

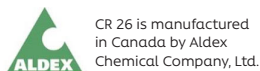
INCOMING WATER QUALITY (recommended)

pH range	5.5 to 8.5	Phosphate	<0.5 to mg/L
Arsenic (AS)	5 to 100 ppb	Sulfate	<100 mg/L
Iron (Fe)	<0.5 to mg/L	Fluoride	<1.0mg/L
Manganese (Mn)	<.05 mg/L	Hardness	<300 mg/L
Sulfides	<.1 mg/L	Sediment	use pre-filter
Silica	<30 mg/L	Tannins	Consult Chart

Attention: When used in combination with a water conditioning unit (not required) place conditioner upstream of Charger POE system.

Notes:

- The above information above is provided as a guideline only, the water treatment professional is responsible for completing the installation profile for specifying the appropriate water system.
- Charger POE systems can reduce higher concentrations of arsenic. Consult Charger Water Treatment for more information.
- Typical treatment goal above reflects current EPA MCL of 10 ppb arsenic.
- Media life projections are available from Charger Water Treatment upon request and review of water profile and projected use information.
- Exhausted media passes TCLP (Toxic Characteristic Leaching Procedure) method EPA 1311



CR 26 is manufactured in Canada by Aldex Chemical Company, Ltd.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However, we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of such actions.

Elgin, IL 800-642-4274
 Danville, VA 800-220-0596
 Ft Myers, FL 888-317-3421
 San Antonio, TX 877-553-3010

Bedford, NH 866-201-7853
 Reno, NV 888-210-8810
 Jacksonville, FL 877-858-2717
 Youngstown, OH 844-677-0547

Phoenix, AZ 844-249-3081
 Ft. Worth, TX 877-627-9976
 Pottstown, PA 800-327-5572



REVERSE OSMOSIS

Drinking Water System



Reverse Osmosis (RO) works like this:

The pressure from a household tap forces water through a semipermeable membrane. This membrane separates the water at the molecular level. The membrane acts like a filter, assuring the RO water has substantially reduced impurities and dissolved solids. This cleaner, more refined water is then stored in a holding tank, ready at your convenience.

The 'RO' of the system is the secret.

RO is Reverse Osmosis. This is the natural process which sets the foundation of RO systems. It may sound technical, but osmosis is a natural, organic phenomenon, a process that occurs in nature on a continuous basis. Vegetation, like trees, plants and flowers attain their nutrients by using osmosis to draw water from the soil.



BENEFITS:

- Delicious, sparkling-clear drinking water
- Convenience: Fresh, clean water at your faucet
- Pristine, flavorful coffee, tea and juice
- Quality water for your aquarium
- Cleanly rinsed fresh fruits and vegetables
- Crystalline, harder and clearer ice cubes
- Prolong the life of your humidifier or steam iron
- Spotless glassware when rinsed with RO water
- Cost effective: No more bottled water costs
- Better tasting soups, sauces and meals
- Environmentally sound: No chemicals
- Great for family pets