

Adsorption of Arsenic, Iron Manganese, Hydrogen Sulfide*

Pursanova 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 PCR-26 media they also provide excellent removal of iron, manganese and hydrogen sulfide contamination from potable and non-potable aqueous streams.





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

PCR-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

PCR-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. PCR-26 can be backwashed at lower flow rates to achieve ideal bed expansion needed to remove metal oxide precipitates generated during the service cycle. PCR-26 is easy to handle versus other oxidative media and many naturally occurring zeolites.

Chemical-free Regeneration

The oxidative chemical locked inside PCR-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

PCR-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

PCR-26 is easy to handle versus other oxidative media and many naturally occurring zeolites. Depending on where you live, contaminants from sewage, industrial waste and agricultural run-off can also seep into your water supply.



Expected Service Life

Due to the unique nature of PCR-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. This system will eliminate iron and will remove the negative effects of H_2S . Both of these can damage your plumbing and fixtures, discolor your laundry, or create unpleasant odors in drinking water and showers.

Safe for TCLP After Exhaustion

Once exhausted, PCR-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.

POE WATER TREATMENT COMPARISONS					
FEATURE	Anion Exchange	Reverse Osmosis	AdVantEdge Medallion Series AD33 System	Pursanova PCR-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	

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.

Notes:

- 1. The information is provided as a guideline only; the water treatment professional is responsible for completing the installation profile for specifying the appropriate water system.
- 2. Pursanova POE systems can reduce higher concentrations of arsenic. Consult Pursanova dealers for more information.
- 3. Typical treatment goal above reflects current EPA MCL of 10 ppb arsenic.
- 4. Media life projections are available from Pursanova Ltd., Inc. upon request and review of water profile and projected use information.
- 5. PCR-26 is manufactured in Canada by Aldex Chemical Company, Ltd.
- 6. Exhausted media passes TCLP (Toxic Characteristic Leaching Procedure) method EPA 1311

POE MODEL SPECIFICATIONS

SPECIFICATIONS	6 GPM Model	8 GPM Model	10 GMP Model
System Dimensions	12" W x 52" H fiberglass	13" W x 54" H fiberglass	14" W x 65" H fiberglass
Media Type	PCR-26	PCR-26	PCR-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 12	
Treatment Goal (typical)	<10 ppb total arsenic³	
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