

# Crusader Anion Filter

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The Crusader Anion filter is designed to address a particular ionic range of compounds such as Nitrate, Sulfates, and excess Alkalinity. Systems are loaded with Strong Base Anion resin in the Chloride form.

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## Operation of the Filter

Water can contain a number of contaminants such as Nitrate Sulfate, and excess Alkalinity. These contaminants are particularly difficult to remove from water and can often have serious aesthetic & health effects. This filter is designed to remove various contaminants from water based on a comprehensive water analysis.

## Filtration Media - Hydrolyte Anion Hybrid

The exchange media is a high quality, FDA-certified, commercial-grade strong base Type II Anion Resin with a very high whole bead count and no color throw or odor when properly specified, installed, and regenerated. The media combines high operating capacity with excellent chemical and physical stability to ensure a long, dependable life.

## Controller/Meter

Regeneration of the system is initiated by a simplified electronic control timer, which electronically meters filtered water flow and makes decisions to regenerate based on water consumption and program settings.

## Regeneration

These filter models are controlled electronically. A fully programmable microprocessor controls Upflow Regeneration, Backwash, Rapid Rinse, Tank Fill, and Return-to-Service cycles.

## Control Valve

A hydraulically balanced piston slides effortlessly through seals & spacers. All parts in the waterway are either coated brass or composite Noryl® materials to ensure a long and reliable service life on 3 cubic foot systems.

## Resin & Brine Tanks

All models feature a non-corrosive fiberglass resin tank with a one-piece thermoplastic inner liner. The tank has a maximum working pressure of 90 psi and a working temperature up to 120°F. The tank is approved by NSF, UL, and the FDA. It also meets WQA Standard S-100, and all fiberglass tanks carry a limited lifetime warranty. A high capacity brine tank is included as part of the system. The brine tank is a combination brine maker and salt storage vessel and is made of tough, high-density polyethylene. Larger tanks are available for extra salt storage capacity, if required.

## Brine System

Brine refill is automatically controlled by the computer to provide the exact amount of brine for each regeneration. The Brine System has a float and safety valve shut-off, which minimizes the chance of overflowing the brine tank. All units are equipped with an air check.

## Sodium Hydroxide (Caustic)

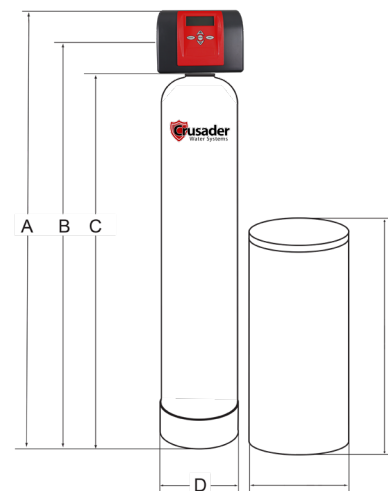
NaOH feed systems are available that dose caustic into the brine with a direct interface to the system controller. This helps to improve throughput in dealkolization applications. 0.33 lbs of NaOH is injected per ft<sup>3</sup> of Anion Resin.

These filters should only be purchased after a water analysis has been completed.

The following contaminants should be tested: **Iron, Manganese, Hydrogen Sulfide, TDS, pH, Hardness, Chlorine, Chloramine, Sulfate, Nitrate, Silica, Fluoride, Tannins, Lignins, Total Alkalinity, and Turbidity.**

[www.crusaderwater.com](http://www.crusaderwater.com)

# Commercial Anion Filter



## Crusader Anion Filter

	CS-ANION-1	CS-ANION-2	CS-ANION-3
Maximum Capacity (Kgr or CaCO <sub>3</sub> )	10,000	20,000	30,000
Salt Used Per Cleaning (lbs)	5	10	15
Maximum Influent Hardness Level (gpg)	5	5	5
Maximum Influent Chlorine Level (ppm)	0.1	0.1	0.1
Service Flow Rate (gpm) @ 55 psi inlet, 15 psi drop	3	6	9
Water Pressure Range (psi)	45 - 75	45 - 75	45 - 75
Maximum Inlet Piping Size	1"	1"	1"
Dimension A - Overall System Height	61	61	59
Dimension B - System Piping Height	56.09	56.09	54.09
Dimension C - Pressure Vessel Height	54	52	54
Dimension D - Pressure Vessel Diameter	10	12	13
Total Space Required L x W x H (Inches)	18 x 29 x 61	18 x 29 x 61	18 x 31 x 59
Shipping Weight (lbs)	90	115	180

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