HARMSCO®
Premium Carbon Cartridges

Chlorine and Lead Reduction

Dual-stage Carbon Cartridges for Taste, Odor, Chlorine and Lead Reduction

- High chlorine reduction
- Low initial pressure drop
- Increased contaminant removal
- No release of carbon fines
- High dirt holding capacity
- No channeling or bypass

Features

- 100% coconut shell carbon
- Made from polyolefin filter media
- Dual stage depth filtration
- Heat fused inner layer
- 5-micron nominal filtration
- FDA approved components
- Radial flow design
- Available in a variety of sizes and flow rates

Applications

- Commercial Drinking Water
- Marine/Aquatic Filtration
- Food & Beverage Filtration
- Industrial Water Filtration
- Point of Entry Residential Filtration
- Reverse Osmosis Pre-filtration
- Water Bottling Filtration
- Science/Laboratory

COMPONENT
Models HAC-10-W, HAC-20-W and HAC-10-LR-W are tested and Certified by NSF International against NSF/ANSI Standard 42 for materials requirements only

HARMSCO® Filtration Products
INDUSTRIAL DYNAMICS CO
1-800-940-0453
Made in USA
Filter Media: Composite of pulverized activated carbon and polyolefin fibers bonded together with wet molding process and thermally bonded to eliminate channeling and media migration.

Temperature Limit: 160°F (71°C)
Micron Rating: 5 Nominal

Cartridge Selection/Sizing Guide

Harmsco’s activated carbon cartridges outperform “canister” and “impregnated” types of cartridges due to their increased carbon content, cellulose-free construction, wet molding process and dual-stage construction. They have been tested by a certified national laboratory using test procedures described in NSF Standards 42 and 53. Test results are shown below:

### Chlorine Removal
![Chlorine Removal Graph]

Test data generated by independent laboratory at 1 gpm using test procedures described in NSF Standard 42. Average chlorine feed at 2 ppm.

### Organic Chemical Removal
![Organic Chemical Removal Graph]

Test data generated by independent laboratory at 1 gpm using test procedures described in NSF Standard 53. TCE used as test contaminant at average feed of 300 ppb.

### Lead Removal and Performance

Harmsco’s HAC-10-W lead removal cartridges employ the use of a specially formulated ceramic lead removal matrix plus pulverized activated carbon to reduce lead concentrations up to 99% with very short contact time. The “ATS™” adsorbent material works well in hard water and in the presence of iron and manganese. Performance is relatively unaffected by pH. They have been tested using the test protocol described in NSF Standard 53 and certified by an independent laboratory. The test results shown below indicate our HAC-10-LR-W lead removal cartridge will effectively reduce lead concentrations up to 99% for 4,000 gallons of low pH water and up to 92% for 3,000 gallons of high pH water.

### Low pH and Alkalinity
![Low pH and Alkalinity Graph]

Test data generated by certified national laboratory using the protocol described in NSF Standard 53 using a flow rate of 0.75 gpm and an average feed of 150 ppb lead. Water’s pH was 6.5 and alkalinity 10-30 ppm as CaCO₃.

### High pH and Alkalinity
![High pH and Alkalinity Graph]

Test data generated by certified national laboratory using the protocol described in NSF Standard 53 using a flow rate of 0.75 gpm and an average feed of 150 ppb lead. Water’s pH was 8.5 and alkalinity 170-250 ppm as CaCO₃.

Note: This publication is to be used as a guide. The data within has been obtained from many sources and is considered to be accurate. Harmsco does not assume liability for the accuracy and/or completeness of this data. Changes to the data can be made without notification. Temperature, Pressure, Flow Rates, Differential Pressures, Chemical Combinations and other unknown factors can affect performance in unknown ways. Limited Warranty: Harmsco warrants its products to be free of material and workmanship defects. Determination of suitability of Harmsco products for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. The end user/installer/buyer shall be liable for the product’s performance and suitability regarding their specific intended applications. End users should perform their own tests to determine suitability for each application.