

HARMSCO®

PFAS

Premium Hurricane® Carbon Cartridges

PFOS/PFAS Removal

Designed for Hurricane® and WaterBetter® filter housings.

Activated Carbon cartridges designed for removal of hazardous PFOS/PFAS contaminants from Potable water sources. The industry's largest carbon block cartridge.

- PFOS/PFAS are a group of man-made chemicals that persist in the environment. These chemicals have been used for decades in fire retardant foams and other fire fighting sprays. The characteristics that make them useful are the reasons they persist in the environment which leads to harmful buildup in humans & animals



Performance of carbon block core validated by the U.S. EPA

HC/170-AC-5

Protect Against

- ▶ Increased cholesterol levels
- ▶ Immune system changes
- ▶ Decreased fertility
- ▶ Altered thyroid function
- ▶ Increased risk of certain types of cancer
- ▶ Changes in learning & behavior of children
- ▶ Abnormal changes of developing fetus

Activated Carbon Features

- ▶ NSF/ANSI/CAN Standard P473 Tested*
- ▶ NSF/ANSI/CAN Standard 61 Certified
- ▶ Flow rates up to 15gpm for maximum PFOS/PFAS removal per cartridge
- ▶ Solutions offered with up to 1,400,000 gallons of filtration capacity between cartridge change-outs (HUR 16X170FL)



Certified to NSF/ANSI/CAN Standard 61



HC/40-AC-5

HC/90-AC-5



Firefighters using fire retardant foam containing PFOS/PFAS

Premium Hurricane® Carbon Cartridges

Specifications

- ▶ **Carbon:** high performance extruded activated carbon block
- ▶ **Outer layer:** 5 micron nominal pleated Polyester-Plus™ media
- ▶ **Center tubes:** PVC, rigid and perforated
- ▶ **End caps:** Plastisol (pliable PVC) Dual Durometer
- ▶ **Directional flow:** radial (outside to in) for low pressure drop
- ▶ **Temperature:** rated to 125°F (52°C)



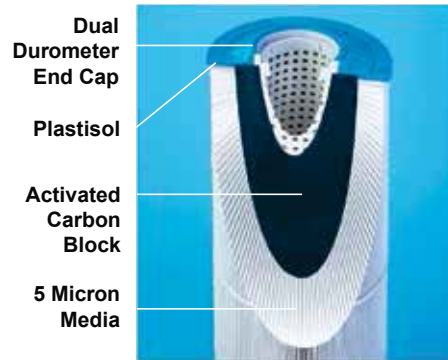
Performance of carbon block core validated by the U.S. EPA

Cartridge Selection/Sizing Guide

7-3/4" O.D. Hurricane® Carbon Cartridges

Cartridge Length

Cartridge Length	Product Code	Nominal Micron Rating	(sq.ft.)	Recommended Flow Rate (GPM)	Min. Carbon Content (lbs)	Capacity
9-5/8"	HC/40-AC-5	5	30	5	2.5	30,000 gallons
19-1/2"	HC/90-AC-5	5	60	10	5	60,000 gallons
30-3/4"	HC/170-AC-5	5	90	15	8	90,000 gallons



Cut-away view

PFOS/PFAS Data Summary - Filter 1

Sample Point	Accumulated Volume Effluent 1	Influent Total PFOA + PFOS Concentration (ppt)	Effluent Total PFOA + PFOS Concentration (ppt)	Passing Criteria
10 UV	10 UV	1530	<10	Passed
50%	5000 gallons	1520	<10	Passed
100%	10000 gallons	1490	<10	Passed
150%	15000 gallons	1550	<10	Passed
180%	18000 gallons	1560	<10	Passed
200%	20000 gallons	1400	<10	Passed
300%	30000 gallons	1440	<10	Passed
360%	36000 gallons	1600	40	Passed
400%	40000 gallons	1560	40	Passed
450%	45000 gallons	1558	30	Passed
460%	46000 gallons	1558	80	Fail

PFOS/PFAS Data Summary - Filter 2

Sample Point	Accumulated Volume Effluent 1	Influent Total PFOA + PFOS Concentration (ppt)	Effluent Total PFOA + PFOS Concentration (ppt)	Passing Criteria
10 UV	10 UV	1530	<10	Passed
50%	5000 gallons	1520	<10	Passed
100%	10000 gallons	1490	<10	Passed
150%	15000 gallons	1550	<10	Passed
180%	18000 gallons	1560	<10	Passed
200%	20000 gallons	1400	<10	Passed
300%	30000 gallons	1440	<10	Passed
360%	36000 gallons	1600	40	Passed
400%	40000 gallons	1560	60	Passed
450%	45000 gallons	1558	30	Passed
460%	46000 gallons	1558	120	Fail

Hurricane® XP (HUR 5x170FL)



Certified to NSF/ANSI/CAN Standard 61



Hurricane® HP series

* Test through IAPMO QFT Laboratory, LLC. to NSF/ANSI/CAN Standard P473

Lab Detection Limit 10 ppt

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 their 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.