# Purefast<sup>®</sup> Home20

### Handout

#### DEXSORB<sup>®</sup> for PFAS Removal

Cyclopure's DEXSORB granular adsorbent is a first-ever use of renewable cyclodextrins in water treatment. Sub-nanometer cyclodextrins are molecularly selective for removal of per- and polyfluoroalkyl substances (PFAS) from drinking water. DEXSORB is certifi ed under NSF 61 as safe for drinking water treatment.

**NSF** 

Certified to NSF/ANSI/CAN 61

5.3"

\*Housing is Not Included

PFH20

4.5"

Purefast Home20

Cartridge



#### **Product Specifications**

- Treatment Capacity<sup>1)</sup>: 20,000 gallons
- Operating Temperature: 40-120°F
- Pressure Drop Spec: < 7 psi @ 5 gpm
- Max Operating Pressure: 80 psi
- Size: 4.5" (Diameter) x 20" (Height)
  Rated Flow Rate: 5 gpm
- Peak Flow Rate: 8 gpm
- Compatible with Big Blue Filter Systems and other standard filter housings with 20" height and 4.5" diameter

#### Pricing

- \$300 per unit, including the filtration cartridge preloaded with DEXSORB media
- Filter housing not included
- Taxes and shipping not included

## Performance Data Sheet

Internal testing demonstrates full removal of 8 PFAS (i.e., PFOA, PFOS, PFHpA, PFHxS, PFNA, GenX, PFBS, and PFDA) at an influent concentration of 50 ppt per PFAS.

Substance	Influent Challenge Concentration	Effluent Concentration	US EPA Final Drinking Water Limit
PFOA	50 ng/L	Non-Detect <sup>2)</sup>	< 4 ng/L
PFOS	50 ng/L	Non-Detect	< 4 ng/L
PFHpA	50 ng/L	Non-Detect	NA
PFHxS	50 ng/L	Non-Detect	Hazard Index <sup>3)</sup> < 1.0
PFNA	50 ng/L	Non-Detect	Hazard Index < 1.0
GenX	50 ng/L	Non-Detect	Hazard Index < 1.0
PFBS	50 ng/L	Non-Detect	Hazard Index < 1.0
PFDA	50 ng/L	Non-Detect	NA

### **Demonstrated Performance**

DEXSORB has been applied in other residential filtration products and large-scale engineered treatment systems across the U.S. It has demonstrated superior effectiveness and capacity for PFAS removal in the treatment of drinking water, surface water and groundwater.

- Purefast Countertop Filter: Using DEXSORB media in the filter, Cyclopure's Purefast filter for Brita® pitchers has been certified under NSF 53 for the removal of PFOA/PFOS.
- DEXSORB is being used to treat PFAS at municipal drinking water plants in pilot systems in Massachusetts, Maryland and Alabama. The DEXSORB Packed-Bed Filtration System has received New Technology Approval in the state of Massachusetts to treat PFAS in drinking water.

 Purefast Home products have been available for sale and installed in U.S. households to remove PFAS from drinking water since September 2023. cyclopure

# Product Support Contact

PurefastHome@cyclopure.com cyclopure.com

# Purefast<sup>®</sup> Home20

of the school of the later

## Point-of-Entry Water System for PFAS Removal

High-performance water filtration system with DEXSORB® media that removes PFAS from every tap in your home, with a capacity of 20,000 gallons. The Purefast® Home20 filter cartridge connects to your residential water system and is compatible with Big Blue Filter Systems and other standard filter housings with 20" height and 4.5" diameter.

cyclopure

<sup>&</sup>lt;sup>1)</sup> Treatment capacity is based on the above Rated Flow Rates.

<sup>&</sup>lt;sup>2)</sup> Non-Detect means < 1 ng/L. (1 ng/L = 1 ppt)

<sup>&</sup>lt;sup>3)</sup> Defined by US EPA, Hazard Index = PFHxS in ppt /10 ppt + PFNA in ppt /10 ppt + GenX in ppt /10 ppt + PFBS in ppt /2000 ppt. And the Hazard Index should be < 1.0 to comply with the final drinking water PFAS limit by US EPA.

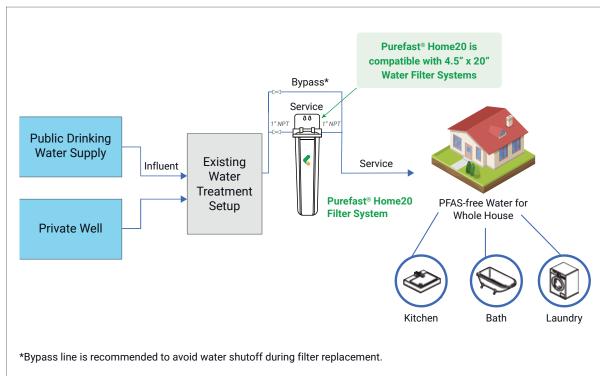
# Purefast<sup>®</sup> Home20

### User Manual

#### Important Information

- Read this manual before Purefast<sup>®</sup> Home20 installation.
- Purefast® Home20 cartridge is compatible with 4.5" x 20" Water Filter Housings, such as Pentair Pentek Big Blue®. Filter Housing is not provided with your purchase.
- Install the system on the main water supply after existing treatment systems (e.g., softener, UV disinfector, pH neutralizer, GAC system, etc.) and upstream of indoor faucets
- We recommend installing a bypass line to avoid water shutoff during filter replacement.
- Purefast® Home20 cartridge comes pre-assembled and is ready for direct installation into a filter housing. Please DO NOT open the unit as this can cause media loss from the cartridge.

## Installation Diagram



#### Installation Instructions

Your Purefast® Home20 system consists of a 4.5" diameter and 20" height polypropylene cartridge, pre-loaded with DEXSORB® media. Filter Housing (such as Pentair Pentek Big Blue®) and accessories are not included. For system commissioning and operation, follow the instructions below:

#### 1. Preparation

- (1) Ensure that the white O-ring is rightly fitted in the groove at the top of the cartridge as shown in Figure 1.
- (2) Place the cartridge into the filter housing and screw onto the wallmounted head. Using the wrench provided with 4.5" x 20" Water Filter Housings, tighten by turning counterclockwise, as shown in Figure 2.

#### 2. Commissioning

Commissioning backwash is required to condition the system before operation.

- (1) Run water at 4 to 5 gpm through the cartridge for 10 minutes. You may experience pressure drop of up to 10 psi initially.
- (2) Turn off flow to the system and allow the cartridge to sit and fully wet for at least 20 minutes.

#### 3. Operation

After backwashing: (1) Resume flow to the system to begin operation. (2) Enjoy PFAS-free water from indoor faucets.

#### Replacements

- After 3 months, you will receive an email reminder to check if you have reached 20,000 gallons of water usage.
- The replacement cartridge is compact (4.5" x 20"), and can be easily switched out without additional plumbing.
- · See Filter Exchange Program below to learn more.

#### Filter Exchange Program

• Sustainability is a priority at Cyclopure. Our Purefast Home Water Treatment System will do the work to achieve ZERO PFAS at every tap in your home. If you return your used filter vessel to the company, we will ensure that ZERO PFAS waste is returned to the environment. • We use Cyclopure's proprietary PFAS desorption and media regeneration method to separate PFAS from used DEXSORB media at ambient conditions. The separated PFAS waste will then be fully destroyed. Regenerated DEXSORB will be reconditioned for reuse! • When you are ready to replace your current filter, contact us to place a new order. When you receive the new filter, save the shipping box to return the used filter to our Chicago facility. Shipping is prepaid.



Figure 2. Housing tightening with wrench.



Fitted O-ring on Purefast® Home20 cartridge. Figure 1



Performance claims are based on internal test data. Actual performance is dependent on infl uent water quality, flow rates, system design and application. Results may vary. Cyclopure makes no warranties of any kind, expressed or implied, statutory or otherwise, and expressly disclaims all warranties of every kind, concerning its Purefast Home filters, including, without limitation, warranties of merchantability and fitness for a particular purpose, except (i) that the filter should be capable of performing as described in the Performance Data Sheet, and (ii) the filter will be free of defects in materials and workmanship, when used in compliance with installation and operating guidelines, for a period of 3 months from the date of purchase. The company's obligation shall be limited solely to the refund of the purchase price or replacement of the product proven defective, in Cyclopure's sole discretion. Determination of suitability of this product for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. Use of this product constitutes Buyer's acceptance of this Limited Liability.

# Purefast<sup>®</sup> Home20 0-100-0 System

There are **0 PFAS** in your water. 100 We reuse 100% of the cartridge non-drinking water applications. We reuse 100% of the cartridge media in

> There is 0 PFAS waste after use as PFAS are separated and concentrated from media for full destruction to prevent recontamination of the environment.

