FLUORO-SORB® 200 & 400 ADSORBENTS

Adsorption Media for the Remediation and Removal of PFAS

DESCRIPTION

FLUORO-SORB® Adsorbent is a proprietary, surface-modified granular clay media that is proven to effectively treat perfluoroalkyl and polyfluoroalkyl substances (PFAS) in variety of removal and remediation applications. FLUORO-SORB® 200 and FLUORO-SORB® 400 Adsorbents feature larger grain size distributions for deployment in flow-through water filtration processes, permeable reactive barriers, and REACTIVE CORE MAT® composite geotextile mats. FLUORO-SORB® Adsorbent exhibits fast PFAS adsorption kinetics. The unique composition resists competitive adsorption from other water constituents and co-contaminants, improving effectiveness and efficiency. The media is manufactured in the United States and certified to the requirements of NSF/ANSI/CAN 61 for use in drinking water treatment facilities.







REACTIVE CORE MAT®

HIGH-PERFORMING TREATMENT OPTION

Superior Technology

- High adsorption capacity for short- and long- chain PFAS resulting in smaller vessels with less media changeouts
- Fast PFAS adsorption kinetics allows for a reduced Empty Bed Contact Time (EBCT)
- Low to no impact by co-contaminants in the waste stream
- Exchangeable with media in existing vessels
- Higher density for more media per vessel

Trusted

- NSF/ANSI/CAN 61 certified
- Made in an ISO 9001:2015 facility
- Made in the USA

ADAPTABLE SOLUTIONS

Superior Technology

- Compatible with flow-through filtration vessels
- Useful as pre- or post-treatment in connection with other treatment media
- Design of Permeable Reactive Barriers (PRBs) for subsurface remediation
- Thin-layer sediment cap when deployed in permeable geotextiles in a REACTIVE CORE MAT®

Treatment Applications

- Drinking Water
- Wastewater (Industrial, Municipal)
- Groundwater
- Surface and Storm Water
- Landfill Leachate
- Sediment Capping

TYPICAL PROPERTIES		
Material Property	FLUORO-SORB® 200	FLUORO-SORB® 400
Specific Gravity	1.76	1.78
Pour Bulk Density	46 lb/ft ³ (737 kg/m ³)	50 lb/ft ³ (801 kg/m ³)
Tapped Bulk Density	52 lb/ft ³ (833 kg/m ³)	56 lb/ft ³ (897 kg/m ³)
Permeability	2.1 x 10 ⁻² cm/s	8.5 x 10 ⁻² cm/s
% Passing - Upper	93% through #20 mesh (0.85 mm)	92% through #14 mesh (1.4 mm)
% Passing - Lower	5% through #45 mesh (0.36 mm)	6% through #35 mesh (0.5 mm)
Median Particle Diameter (D50)	0.64 mm	0.86 mm
Effective Size (D10)	0.43 mm	0.50 mm
Uniformity Coefficient	1.57	1.89

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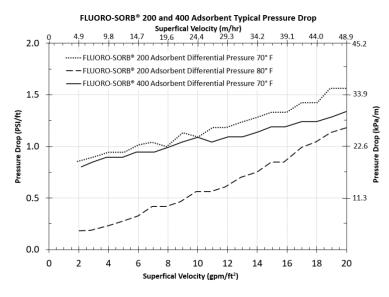


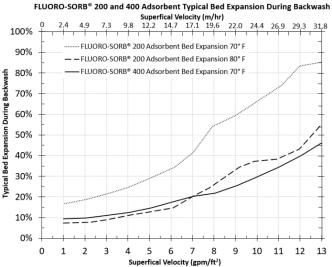
GENERAL INSTRUCTIONS FOR LOADING AND BACKWASHING FLUORO-SORB® ADSORBENT IN A FILTRATION VESSEL

FLUORO-SORB® 200 and 400 Adsorbents can be used in a down-flow, packed bed configuration with either pressure or gravity flow. Backwashing fresh FLUORO-SORB® Adsorbent prior to initial start-up is required for improved performance. The reasons for backwashing are to: (1) remove fines from the media that can lead to flow restriction and excessive pressure drop, (2) wash off trace leachables, and (3) eliminate entrained air from the bed.

Vessel requirements and the recommended steps for loading and backwashing FLUORO-SORB® adsorbent are listed below.

- A distributor or splash plate in the top of the vessel is required. Laterals, a screen, or equivalent in the bottom of the vessel is required. The recommended opening in the bottom laterals or screens is 0.012 in. (0.305 mm).
- A pre-filter for total suspended solids and precipitated iron and manganese is recommended for efficient operation to prevent the media from plugging.
- The inlet pipe or vessel should have an air eliminator valve.
- Load the vessel with the design amount of FLUORO-SORB® Adsorbent and fill with fresh, contaminant-free water. Allow enough space for bed expansion during backwash.
- Backwash the vessel for 10-30 minutes at up to 9 gpm/ft². Water should be directed slowly up through the vessel starting at 1-3 gpm/ft² and gradually increased to 9 gpm/ft² to fluidize the bed.
- After backwash, do not drain vessel. The vessel is now ready for down-flow operation.
- Operational backwash can be performed to relieve excessive differential pressure.





PACKAGING

- 50 lb (22.7 kg) bags
- 1,500 lb (680.4 kg) supersacks

For technical inquiries, project-specific questions, and to obtain a sample for your laboratory testing or pilot treatability study, please contact a CETCO sales representative or send an inquiry to cetco@mineralstech.com.

