

SORBFLOW V Filter Cartridges

- liquid filters
- proprietary modified polymer

SORBFLOW cartridges differ from those offered by the competition where hydrocarbons are removed through surface adsorption onto the medium, SORBFLOW V cartridges employ a proprietary modified polymer that both absorbs and chemically binds the hydrocarbon molecules into its interior matrices.

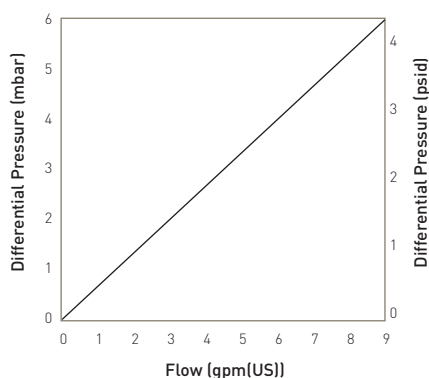
The affinity of the polymeric absorbent for hydrocarbon molecules is so great that accelerated testing by the Toxic Characteristics Leachate Procedure (TCLP) indicated the effluent hydrocarbon level in water to be below current and proposed SEPA / EPA limits. The modified polymer controls the speed of absorption by eliminating the potential for skin formation at the polymer / hydrocarbon interface. Consequently this polymer, when incorporated into a radial flow-design cartridge, ensures maximum utilisation of surface area. The nature of the polymer makes it an effective absorbent for free, emulsified and dissolved oils, synthetic lubricants, grease and a multitude of organic solvents.

Features and Benefits

- <30 ppm @ up to 5.3 USgal per minute
- Absorbed hydrocarbon is chemically bound by polymer and is not leachable at normal working dp's
- Reduces hydrocarbon levels to meet EPA discharge regulations
- Radial flow design of cartridge allows maximum flow with minimal pressure drop
- Absorbent polymer is enhanced to maximise utilisation of surface area
- SORBFLOW V cartridges are completely incinerable
- Increases working life of valuable process fluids



Performance Characteristics



A maximum flow rate of 19 litres per minute per 1000mm (40") length cartridge is recommended for the most effective removal of trace hydrocarbon contaminant.

40" Size (1000 mm) Cartridge

Specifications

Materials of Construction

- Absorbent: Proprietary modified Polymer
- Support Construction: 100% Polypropylene

Recommended Operating Conditions

Maximum Temperature:
65 °C (149.0 °F) @ 20 psid (1.4 bar)
82 °C (179.6 °F) @ 10 psid (0.7 bar)

Maximum Differential Pressure
40 psid (2.8 bar) @ 24°C (75.2°F)

Changeout Pressure: 0.7 bar (10 psi)

pH Range: 2 - 12

Dimensions

Lengths: 248 mm (3.7") up to 1000 mm (39.8")
Outside diameter: 68 mm (2.7")
Inside diameter: 25 mm (0.98")

Biosafety

The SORBFLOW V is classified non-hazardous and incinerable. Disposal must be dictated by local regulations pertaining to the absorbed contaminant.

Adsorption of Oils & Hydrocarbons

- Up to 99% removal of dissolved hydrocarbons
- Available in lengths up to 1 metre with standard endcaps
- Absorbent polymer chemically binds the hydrocarbon and prevents leaching
- Low pressure drop, high flow rate achieved through radial flow design

SORBFLOW V absorbent cartridges are the economical solution for effective trace hydrocarbon removal in aqueous liquids. Maximum surface area is achieved through an enhanced polymeric absorbent in a radial flow design cartridge. For many demanding hydrocarbon-contaminated aqueous fluid problems, SORBFLOW V is the solution.

Performance

The efficiency of a SORBFLOW V cartridge is dependant upon the residence time of the fluid within the element, this is in turn directly proportional to the volumetric flow rate.

1. Hydrocarbon Removal Efficiency:
At an equivalent flow rate of 19 litres per minute per 1000 mm (40") cartridge the SORBFLOW V cartridge typically reduces trace hydrocarbon contaminant in excess of 95% in single pass mode. This efficiency level can be maintained only to a net differential pressure of 10 psi. Series or multi pass filtration can virtually eliminate hydrocarbon contamination.
2. Hydrocarbon Absorbent Capacity:
The SORBFLOW V cartridge medium has the potential to remove up to 1000 grams per 1000 mm (40") cartridge of low density octane contaminant or 370g of light / medium grade crude oil per 1000 mm (40") cartridge.

Applications

- Produced water disposal
- Gas & oil facility wastewater
- Water soluble machine tool coolants
- Alkaline parts washing
- Industrial discharge water
- Injection moulding cooling water
- E-Coat paint
- Pre R.O. membrane
- Tanker ballast water
- Aerosol mists
- Plating bath
- Leisure / commercial shipping bilge water
- Compressor condensate
- Post oil / water separator polishing
- Pre carbon bed

Ordering Information

C					PY
Code Length (Nominal)	Code Media	Code Grade	Code End Cap	Code Seal Material	
09 9.75" (248 mm)	X SORBFLOW	V 5	0 DOE	E EPDM	
10 9.875" (251 mm)			3 Flat / 222	N Nitrile	
19 19.50" (500 mm)			7 Fin / 226	S Silicone	
20 20" (508 mm)			8 Fin / 222	V Viton	
30 30" (762 mm)			T 222/ flat (no recess)		
39 39.25" (1000 mm)					



Ross Road, Portrack Lane, Stockton-on-Tees, TS18 2NH
tel: +44 (0) 1642 635620 fax: +44 (0) 1642 635621 email: sales@carbisfiltration.co.uk
www.carbisfiltration.co.uk



We have a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's Standard conditions of sale.