



OAC-20BB

OIL ADSORBING CARTRIDGE

- Modified cellulose-based filter material chemically bonds specifically with hydrocarbons and other pollutants such as dissolved and dispersed oils from water
- Instantaneous adsorption, more effective than activated carbon
- Up to 90 percent of total hydrocarbons are removed in a single pass
- For use in 20-inch Big Blue® filter housings

The OAC-20BB, made from modified cellulose-based filter media, is processed into sheets and assembled into cartridges for use in standard 20-inch Big Blue filter housings.

Features

- Instantaneous adsorption – up to 90 percent of total hydrocarbons removed in a single pass
- High flow rates
- Removes dissolved and dispersed oils
- Low pressure drop
- Media can hold 250-300 percent of its own weight, with no release of removed hydrocarbons

Applications

- Gas and oil facilities
- Leisure/commercial shipping bilge water
- Surface water runoff (truck stops, airports, parking lots)
- Auto service stations
- Machine shops
- Industrial processes
- Factories and repair shops
- Car and truck washes

Installation

Certain applications may require pre-filtration.

Change-Out Frequency

Change-out frequency will depend on the oil burden they have to handle. Because no appreciable increase in pressure drop is observed during service life, the filter must be changed when its adsorption capacity is exhausted.

Dimensions		Material Specifications	
Length	20.125 in. (511 mm)	End Caps	PVC Plastisol
Outside Diameter	4.5 in. (114 mm)	Center Core	Natural Polypropylene
Core I.D.	1.110 in. (28 mm)	Outer Net	Polyethylene
Temperature Limit	125°F (51.7°C)	Media	Modified Cellulose
Flow Rate	5-10 gpm (19-38 L/min)	Area	18 sq. ft. (1.6 sq. m.)
Pressure Drop (at 5-10 gpm)	0.2-1.0 psi (0.01-0.07 bar)	Weight	1.75 lbs. (0.8 kg)
		Chemical Notification #	0 (zero)

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Oil Adsorbing Cartridge

Specific Gravity, Viscosity and Weights of Common Liquids

Liquid	Specific Gravity	Viscosity 60°F	Weight lbs/gallon
Miscellaneous Liquids			
Water	1.0	31.5	8.33
Gasoline	.68-.74	30	5.6-6.2
Jet Fuel	.74-.85	35	6.2-7.1
Kerosene	.78-.82	38	6.5-6.8
Turpentine	.86-.87	33	7.2
Varnish Spar	0.9	1600	7.5
Fuel Oil and Diesel Oil			
No.1 Fuel Oil	.82-.95	38	6.8-7.9
No.2 Fuel Oil	.82-.95	50	6.8-7.9
No.3 Fuel Oil	.82-.95	68	6.8-7.9
No.5A Fuel Oil	.82-.95	400	6.8-7.9
No.5B Fuel Oil	.82-.95	600	6.8-7.9
No.6 Fuel Oil	.82-.95	70000	6.8-7.9
No.2D Diesel Fuel	.82-.95	68	6.8-7.9
No.3D Diesel Fuel	.82-.95	120	6.8-7.9
No.4D Diesel Fuel	.82-.95	600	6.8-7.9
No.5D Diesel Fuel	.82-.95	5000	6.8-7.9
Crankcase Oil - Automobile Lubricating Oils			
SAE 10	.88-.935	600-900	7.3-7.8
SAE 20	.88-.935	900-3000	7.3-7.8
SAE 30	.88-.935	3000-4400	7.3-7.8
SAE 40	.88-.935	4400-6000	7.3-7.8
SAE 50	.88-.935	6000-10000	7.3-7.8
SAE 60	.88-.935	10000-17000	7.3-7.8
SAE 70	.88-.935	17000-45000	7.3-7.8
Transmission Oils - Automobile Transmission Gear Lubricants			
SAE 90	.88-.935	5500	7.33-7.79
SAE 140	.88-.935	12000	7.33-7.79
SAE 250	.88-.935	50000	7.33-7.79

Liquid	Specific Gravity	Viscosity 60°F	Weight lbs/gallon
Other Oils			
Castor Oil	0.96	9000	8.00
Chinawood	0.943	1800	7.85
Coconut	0.925	500	7.70
Cod	0.928	600	7.73
Corn	0.924	700	7.70
Cotton Seed	.88 - .925	600	7.33 - 7.7
Cylinder	.82 - .95	14000	6.83 - 7.9
Navy No.1 Fuel	0.989	1100	8.24
Navy No.2 Fuel	1.0	24000	8.33
Gas	.887	90	7.39
Insulating Lard	.912-.925	600	7.6 - 7.7
Linseed	.925-.939	500	7.7 - 7.82
Raw Menhadden	0.933	500	7.77
Neats Foot	0.917	1000	7.64
Olive	.912-.918	550	7.6 - 7.65
Palm	0.924	700	7.70
Peanut	0.92	500	7.66
Quencing	--	900	--
Rape Seed	0.919	900	7.65
Rosin	0.98	7800	8.16
Rosin (Wood)	1.09	Extreme Viscose	9.1
Sesame	0.923	500	7.69
Soya Bean	.927-.98	475	7.72 - 8.16
Sperm	0.883	250	7.35
Turbine (Light)	0.91	350	7.58
Turbine (Heavy)	0.91	1400	7.58
Whale	0.925	450	7.70

Performance

The Oil Adsorbing cartridge typically reduces hydrocarbon contamination up to 90-95 percent in a single pass. Lower outlet levels of hydrocarbons can be achieved by connecting cartridges in series. Higher flow rates also can be achieved by connecting cartridges in parallel.

For hydrocarbon-adsorbing capacity: The cartridge media has the potential to remove up to 2270 grams (5 lbs.) hydrocarbon contaminant. On this basis, the table below provides expected life data in hours or gallons at several contaminant levels based on a 10 gpm flow rate per 4.5" x 20" cartridge.

Hydrocarbon Concentration (PPM)	Hydrocarbon Concentration (% by weight)	Hydrocarbon Removal per Minute (grams)	Estimate Life in Hours	Gallons Fluid Treated	Estimated Cost per Gallon of Treated Fluid
10	0.001	0.36	106	63,308	0.001
100	0.01	3.6	10.6	6,330	0.01
1000	0.1	36	1.1	633	0.11

NOTE: Operating flow will vary based on applications, type of pollutants, flow rates and level of contamination.

DISPOSAL: Safe and acceptable method to meet all local and EPA regulations is recommended. End user is responsible for safe disposal of used cartridge at user's cost. Consult factory for additional information.

