# LENNTECH

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### **OIL ADSORBING CARTRIDGE**

- Modified cellulose-based filter material chemically bonds specifically with hydrocarbons and other pollutants such as dissolved and dispersed oils in 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 filter cartridge is made from modified cellulose-based filter media which 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 in the application. Because no appreciable increase in pressure drop is observed during service life, the filter must be changed when its adsorption capacity is exhausted.

 Dimensions
 20.125 in. (511 mm)

 Length
 4.5 in. (114 mm)

 Outside Diameter
 1.110 in. (28 mm)

 Temperature Limit
 125°F (51.7°C)

 Flow Rate
 5-10 gpm (19-38 L/min)

 Pressure Drop (at 5-10 gpm)
 0.2-1.0 psi (0.01-0.07 bar)

Material Specifications End Caps Center Core Outer Net Media Area Weight Chemical Notification #

PVC Plastisol Natural Polypropylene Polyethylene Modified Cellulose 18 sq. ft. (1.6 sq. m.) 1.75 lbs. (0.8 kg) 0 (zero)



### OAC-20BB Oil Adsorbing Cartridge

#### Specific Gravity, Viscosity, and Weights of Common Liquids

Liquid	Specific Gravity	Viscosity 60°F	Weight Ibs/gallon	Liquid	Specific Gravity	Viscosity 60°F	Weight Ibs/gallon
Miscellaneous Liquids				Other Oils			
Water	1.0	31.5	8.33	Castor Oil	0.96	9000	8.00
Gasoline	.6874	30	5.6-6.2	Chinawood	0.943	1800	7.85
Jet Fuel	.7485	35	6.2–7.1	Coconut	0.925	500	7.70
Kerosene	.7882	38	6.5-6.8	Cod	0.928	600	7.73
Turpentine	.8687	33	7.2	Corn	0.924	700	7.70
Varnish Spar	0.9	1600	7.5	Cotton Seed	.88 – .925	600	7.33 - 7.7
Fuel Oil and Diesel Oil			Cylinder	.82 – .95	14000	6.83 - 7.9	
No.1 Fuel Oil	.8295	38	6.8-7.9	Navy No.1 Fuel	0.989	1100	8.24
No.2 Fuel Oil	.8295	50	6.8-7.9	Navy No.2 Fuel	1.0	24000	8.33
No.3 Fuel Oil	.8295	68	6.8-7.9	Gas	.887	90	7.39
No.5A Fuel Oil	.8295	400	6.8-7.9	Insulating Lard	.912925	600	7.6 - 7.7
No.5B Fuel Oil	.8295	600	6.8-7.9	Linseed	.925939	500	7.7 - 7.82
No.6 Fuel Oil	.8295	70000	6.8-7.9	Raw Menhadden	0.933	500	7.77
No.2D Diesel Fuel	.8295	68	6.8-7.9	Neats Foot	0.917	1000	7.64
No.3D Diesel Fuel	.8295	120	6.8-7.9	Olive	.912918	550	7.6 - 7.65
No.4D Diesel Fuel	.8295	600	6.8-7.9	Palm	0.924	700	7.70
No.5D Diesel Fuel	.8295	5000	6.8-7.9	Peanut	0.92	500	7.66
Crankcase Oil - Automobile Lubricating Oils				Quencing		900	
SAE 10	.88935	600-900	7.3-7.8	Rape Seed	0.919	900	7.65
SAE 20	.88935	900-3000	7.3-7.8	Rosin	0.98	7800	8.16
SAE 30	.88935	3000-4400	7.3-7.8	Rosin (Wood)	1.09	Extreme Viscose	9.1
SAE 40	.88935	4400-6000	7.3-7.8	Sesame	0.923		7.69
SAE 50	.88935	6000-10000	7.3-7.8	Sova Bean	.92798	475	7.72 - 8.16
SAE 60	.88935	10000-17000	7.3-7.8	Sperm	0.883	250	7.35
SAE 70	.88935	17000-45000	7.3-7.8	Turbine (Light)	0.883	350	7.58
Transmission Oils - Automobile Transmission Gear Lubricants				Turbine (Heavy)	0.91	1400	7.58
SAE 90	.88935	5500	7.33-7.79	Whale	0.91	450	7.70
SAE 140	.88935	12000	7.33-7.79	wnaie	0.925	430	/./0
SAE 250	.88935	50000	7.33-7.79				

#### 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.

**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.

## LENNTECH by

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