

# DuraKleen™ V15 and V8

# Extended Surface Activated Carbon Filter



# **FEATURES**

Effective removal of odors and VOC's, diesel exhaust, acid gas, ammonia and amines

Constructed with premium grade coconut shell carbon

Available in MERV 8 and MERV 15

## DuraKleen V15 and V8

As worldwide Indoor Air Quality specifications become more demanding, gas phase adsorption is quickly becoming a major factor in commercial and industrial air filtration systems. The DuraKleen-V15 and DuraKleen-V8 are an excellent high performance solution in applications such as airports, industrial facilities, chemical plants, office buildings, and a wide variety of other air filtration systems.

The Koch Filter DuraKleen-V15 and DuraKleen V8 is an extended surface carbon filter which utilizes premium grade granular 60% activated carbon. DuraKleen's unique V-shaped frame holds up to 7 pounds of activated carbon in a single 24x24x12 filter, which insures maximum VOC and odor removal in any commercial or industrial application.

# **Two Efficiency Levels and Three Standard Sizes**

To meet the tough requirements of today's complex air filtration systems, DuraKleen-V15 and DuraKleen V8 is available in three standard sizes, and two efficiencies.

Consult your Koch Filter representative to find the appropriate DuraKleen-V15 and DuraKleen-V8 model for your system.

# Partial List of Contaminants Best Controlled by Activated Carbon

Acetic acid Ally acetate Benzyl acetate Butyl acetate Butyl ethyl ether Butyric acid Carbon tetrachloride Chloroform Chlorophenol Furan Hexane Isoamyl alcohol Isopropyl alcohol Linalyl format Methyl benzoate Methyl oxyethanol Cyclohexane Cyclohexylbenzene Decene Dichlorotoluene Dimethyl disulfide Ethoxyethanol

Ethyl benzoate Ethyl sulfide Ethylene dichloride Formic acid Octane Pentachloroethane Phenol Styrene Thiophenol Trichlorothane Trimethylpentane Methylsalycilate Nitroanisole Valeric acid Xylene Acetone Benzaledehyde Bezene Butyl alcohol Butyl mercaptan Camphor Chlorobenzene

Chloroctane Cineole Heptane Indene Isoamyl butrate Limonene LimoneneMethylally alcohol Methylally Butanol Methyl ethyl ketone (MEK) Cyclohexanol Cymene Dibutylamine Diethyl ketone Dodecane Ethyl acetate Ethyl methyl ketone Ethylbenzene Ethylene glycol Nitrogen dioxide<100ppb Octanoic acid Pentylamine Propionic acid

Tetrachloroethane Toluene Trichloroethylene Triethylhexane Mineral Spirits Nitroethane Vinyl Pyridine Acrylic acid Benzonitrile Bromoform Butylbenzene Butvl sulfide Carbon disulfide 2-Chloroethanol Chlorotoluene Cresol Heptene Isoamyl acetate Isobutyl propinate Lynaly acetate Methyl acetylsalicyate Methyl cyclohexanol

Methyl propyl ketone Cyclohexanone Decane Dichloroethane Dimethyl disulfide Ethanol Ethynl lactate Ethynl oxalate Ethylcyclohexane Ethylene glycol diethyl ether Nonane Octene Pentyl ether Pyridine Tétrachloroethylene Tributylamine Tridecane Methyl pentanone (MIBK) Naphtha

Undecane

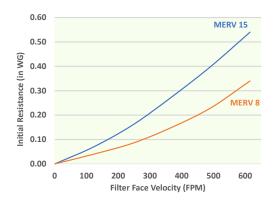
Vinyl toluene



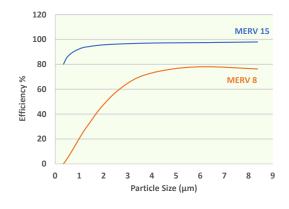
#### DuraKleen V15 & V8 Performance Data

Efficiency	Intial Reistance (inches w.g.)	Final Resistance (inches w.g.)	
MERV 15	0.40	1.5	
MERV 8	0.23	1.5	

# Initial Resistance vs. Air Flow Rate



# **Efficiency by Particle Size**



Part Number NHM (No Header)	Nominal Size*	Actual Size	Capacity (CFM)	Carbon Weight per Filter (lbs.)	Efficiency
	WxHxD	WxHxD	500 FPM		
111-811-101	24 x 24 x 12	23-3/8 x 23-3/8 x 11-1/2	2000	7	MERV 15
111-811-102	20 x 24 x 12	11-3/8 x 23-3/8 x 11-1/2	1000	5.5	MERV 15
111-811-103	12 x 24 x 12	23-3/8 x 23-3/8 x 5-7/8	1000	3.6	MERV 15
Part Number	WxHxD	WxHxD	500 FPM		
111-810-101	24 x 24 x 12	23-3/8 x 23-3/8 x 11-1/2	2000	7	MERV 8
111-810-102	20 x 24 x 12	11-3/8 x 23-3/8 x 11-1/2	1000	5.5	MERV 8
111-810-103	12 x 24 x 12	23-3/8 x 23-3/8 x 5-7/8	1000	3.5	MERV 8

# **DuraKleen V<sup>™</sup> Construction**

# **Activated Coconut Shell Carbon**

Premium grade 60% activated carbon provides maximum adsorption of VOC's and odors.

#### **Pleated Media Packs**

The media packs feature a pleated media encapsulating the carbon between two synthetic layers. The highly active carbon particles allow for higher adsorption rates due to the smaller size of the carbon granules.

easy to install.

**Plastic Frame Components** Rugged components make the

DuraKleen-V extremely rigid and



Specialized sealant eliminates air bypass and secures the individual carbon cells within the frame.

# Thermoplastic Hot-Melt Adhesive

# **Engineering Specifications**

#### 1.0 General Specifications

- 1.1 Filters shall be DuraKleen V15 or DuraKleen V extended surface pleated air filters as manufactured by Koch Filter.
- 1.2 Filters shall be available in nominal depth of 12 inches
- 1.3 Filters are manufactured by an ISO 9001 registered company

### 2.0 Filter Material and Construction

- 2.1 Media shall be 100% synthetic mechanical media impregnated with activated carbon.
- 2.2 Filters shall have a plastic frame
- 2.3 Filters will have single header.
- 2.4 Filter frame shall be comprised of a high impact polystyrene designed to increase filter strength and rigidity. Frame shall be recyclable.

#### 3.0 Filter Performance

- 3.1 Filters shall be MERV 15 or MERV 8 when tested in accordance with ASHRAE 52.2 Test Standard.
- 3.2 For initial resistance of filters, see Performance Data chart above.
- 3.3 Filters shall be rated to withstand a continuous operating temperature up to 130°F.
- 3.4 Filters shall have a recommended final resistance of 1.5" w.g.