



**Koch Filter Corporation**  
Filtration Products Crafted with Pride

# *DuraPURE*<sup>™</sup>

*Extended Surface Activated Carbon Filter*



- Provides effective removal of odors and Volatile Organic Compounds (VOC).
- Constructed with premium grade coconut shell carbon
- Two carbon capacity options
- Available with specially impregnated adsorption medias

**Koch Filter Corporation...Durable. Reliable. Versatile.**

Bulletin No. K-397-B

## DuraPURE Extended Surface Activated Carbon Filter



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 DuraPURE is 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 Corporation DuraPURE is an extended surface carbon filter which utilizes premium grade granular 60% activated carbon. DuraPURE's unique V-shaped frame holds up to 26 pounds of activated carbon in a single 24x24x12 filter, which insures maximum VOC and odor removal in any commercial or industrial application.

### Two Capacity Levels and Three Standard Sizes

To meet the tough requirements of today's complex air filtration systems, DuraPURE is available in three standard sizes, and two media capacity levels, Standard Capacity and High Capacity.

### Specialized Carbon Media

DuraPURE is also available with specialized impregnated carbon media for removal of ammonia, hydrogen sulfide, and other difficult-to-remove compounds. Consult your Koch Filter Corporation representative to find the appropriate DuraPURE model for your system.

## DuraPURE Applications

With two capacity levels, three standard sizes and specially-impregnated carbons available, the DuraPURE can be used effectively in a wide variety of applications.



### Airports

DuraPURE removes toxic compounds, such as aviation fuel emissions, and other airborne gases common to airport environments.



### Hospitals

DuraPURE provides effective control of undesirable odors and compounds such as fumes from parking garages.



### Industrial Manufacturing Plants

DuraPURE is useful in protecting people and processes from a wide range of gaseous emissions in source-capture or ventilation applications.

### Commercial Office Buildings

DuraPURE is an excellent choice for removal of food odors, and other harmful gases commonly found in urban settings.



# DuraPURE Construction and Technical Data

## Activated Coconut Shell Carbon

Premium grade 60% activated carbon provides maximum adsorption of VOC's and odors (other specially impregnated medias are also available).

## Individual Media Cells

Moisture resistant honeycomb carbon cells offer high efficiency contaminant removal, with relatively low resistance to airflow.



## Plastic and Metal Frame Components

Rugged components make the DuraPURE extremely rigid and easy to install. Single or double header available.

## Thermoplastic Hot-Melt Adhesive

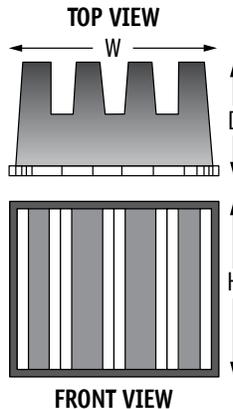
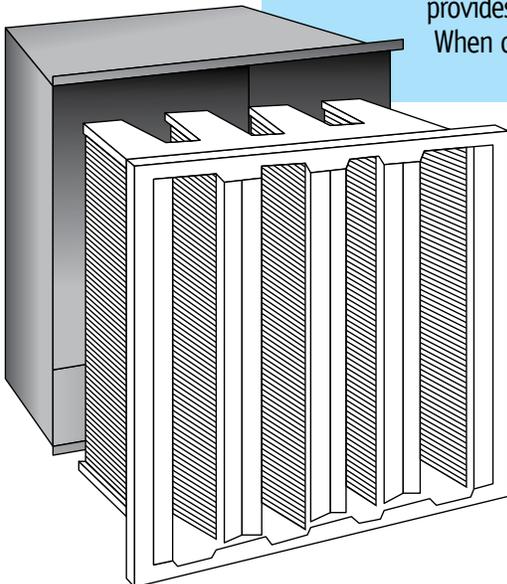
Specialized sealant eliminates air bypass and secures the individual carbon cells within the frame.

## Qualifies as a Koch Green Product

The Koch Green icon identifies the DuraPURE as a product that meets or exceeds our criteria in one or more of the following categories: Earns LEED Points, Reduces Energy Costs, Extends Filter Lifecycles, Conserves Resources and/or Improves Indoor Environmental Quality.

## DustNet™ Afterfilter

DuraPURE filters may also be furnished with an optional DustNet™, a cube-style afterfilter constructed with 100% polyester synthetic filter media. The DustNet™ provides enhanced efficiency and prevents carbon dusting downstream. When ordered, DustNet™ is shipped pre-installed on the DuraPURE filters.



## DuraPURE Dimensions\*

	NOMINAL	ACTUAL
H	24"	23 <sup>3</sup> / <sub>8</sub> "
	20	19 <sup>3</sup> / <sub>8</sub>
	12	11 <sup>1</sup> / <sub>2</sub>
W	24	23 <sup>3</sup> / <sub>8</sub>
D	12	11 <sup>1</sup> / <sub>2</sub>

## Metric Conversion Table

1.0 inches	2.54 cm
1 ft <sup>2</sup>	.093 m <sup>2</sup>
1 FPM	.005/m second
1 CFM	1.7 m/hour
1.0 in. w.g.	249 Pa

\* Dimensions do no include the DustNet™



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## DuraPURE Product Information

PART NO.	RATED FILTER FACE VELOCITY (FPM)	NOMINAL SIZE (W X H X D)	ACTUAL SIZE (W X H X D)	INITIAL PRESSURE DROP (IN W.G.)	CARBON WEIGHT PER FILTER (LBS.)	TOTAL WEIGHT PER FILTER (LBS.)
<b>DuraPURE Standard Capacity</b>						
111-800-001	500	24 x 24 x 12	23-3/8 x 23-3/8 x 11-1/2	0.34	18	33
111-800-003	500	20 x 24 x 12	19-3/8 x 23-3/8 x 11-1/2	0.34	15	30
111-800-002	500	12 x 24 x 12	11-3/8 x 23-3/8 x 11-1/2	0.34	8	26
<b>DuraPURE High Capacity</b>						
111-801-001	500	24 x 24 x 12	23-3/8 x 23-3/8 x 11-1/2	0.74	26	41
111-801-003	500	20 x 24 x 12	19-3/8 x 23-3/8 x 11-1/2	0.74	24	36
111-801-002	500	12 x 24 x 12	11-3/8 x 23-3/8 x 11-1/2	0.74	12	32

### Additional DuraPURE Information

Solvent Capacity of Standard Capacity DuraPURE: 5 lbs.

Solvent Capacity of High Capacity DuraPURE: 8 lbs.

Carbon Activity Rating: Minimum 60% on carbon tetrachloride (CCl<sub>4</sub>) at 25° C.

## Partial List of Contaminants Best Controlled by Activated Carbon

Acetic acid	Ethyl benzoate	Chloroethane	Tetrachloroethane	Methyl propyl ketone
Allyl acetate	Ethyl sulfide	Cineole	Toluene	Cyclohexanone
Benzyl acetate	Ethylene dichloride	Heptane	Trichloroethylene	Decane
Butyl acetate	Formic acid	Indene	Triethylhexane	Dichloroethane
Butyl ethyl ether	Octane	Isoamyl butrate	Mineral Spirits	Dimethyl disulfide
Butyric acid	Pentachloroethane	Limonene	Nitroethane	Ethanol
Carbon tetrachloride	Phenol	LimoneneMethylallyl alcohol	Vinyl Pyridine	Ethynl lactate
Chloroform	Styrene	Methylallyl Butanol	Acrylic acid	Ethynl oxalate
Chlorophenol	Thiophenol	Methyl ethyl ketone (MEK)	Benzonitrile	Ethylcyclohexane
Furan	Trichloroethane	Cyclohexanol	Bromoform	Ethylene glycol diethyl ether
Hexane	Trimethylpentane	Cymene	Butylbenzene	Nonane
Isoamyl alcohol	Methylsilylate	Dibutylamine	Butyl sulfide	Octene
Isopropyl alcohol	Nitroanisole	Diethyl ketone	Carbon disulfide	Pentyl ether
Linalyl format	Valeric acid	Dodecane	2-Chloroethanol	Pyridine
Methyl benzoate	Xylene	Ethyl acetate	Chlorotoluene	Tetrachloroethylene
Methyl oxyethanol	Acetone	Ethyl methyl ketone	Cresol	Tributylamine
Cyclohexane	Benzaldehyde	Ethylbenzene	Heptene	Tridecane
Cyclohexylbenzene	Bezene	Ethylene glycol	Isoamyl acetate	Methyl pentanone (MIBK)
Decane	Butyl alcohol	Nitrogen dioxide<100ppb	Isobutyl propionate	Naphtha
Dichlorotoluene	Butyl mercaptan	Octanoic acid	Lynaly acetate	Undecane
Dimethyl disulfide	Camphor	Pentylamine	Methyl acetylsalicylate	Vinyl toluene
Ethoxyethanol	Chlorobenzene	Propionic acid	Methyl cyclohexanol	

### Corporate Offices

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### Regional Sales Offices/Distribution Centers

Atlanta, GA • Detroit, MI • East Greenville, PA\* • Houston, TX\* • Indianapolis, IN  
 Kansas City, MO • Louisville, KY\* • Madbury, NH • Nashville, TN • Mira Loma, CA\*

\*Denotes manufacturing site.

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Koch Filter Corporation maintains a policy of continuous product research and improvement, and retains the right to change product specification and design without notice.



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