

# **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.

## **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.



#### **Industrial Manufacturing Plants**

DuraPURE is useful in protecting people and processes from a wide range of gaseous emissions in sourcecapture 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.



#### Hospitals

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



## **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.

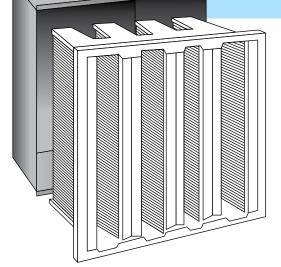
## **Qualifies as a Koch Green Product**

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<sup>™</sup> Afterfilter

**SOC** 

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



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|  |     |  |  |  |  |  |  |

**FRONT VIEW** 

#### DuraPURE Dimensions\*

|   | NOMINAL | ACTUAL              |
|---|---------|---------------------|
| Н | 24″     | 23 <sup>3</sup> /8″ |
|   | 20      | 19 <sup>3</sup> /8  |
|   | 12      | 11 <sup>1</sup> /2  |
| W | 24      | 23 <sup>3</sup> /8  |
| D | 12      | 11 <sup>1</sup> /2  |
|   |         |                     |

#### Metric Conversion Table

| 1.0 inches   | 2.54 cm       |
|--------------|---------------|
| 1 ft²        | .093 m²       |
| 1 FPM        | .005/m second |
| 1 CFM        | 1.7 m/hour    |
| 1.0 in. w.g. | 249 Pa        |

\* Dimensions do no include the DustNet™



# **DuraPURE Product Information**

| PART NO.      | RATED FILTER<br>FACE VELOCITY<br>(FPM) | NOMINAL SIZE<br>(W X H X D) | ACTUAL SIZE<br>(W X H X D) | INITIAL PRESSUR<br>DROP<br>(IN W.G.) | E CARBON WEIGHT<br>PER FILTER<br>(LBS.) | TOTAL WEIGHT<br>PER FILTER<br>(LBS.) |
|---------------|----------------------------------------|-----------------------------|----------------------------|--------------------------------------|-----------------------------------------|--------------------------------------|
| DuraPURE Stan | dard Capacity                          |                             |                            |                                      |                                         |                                      |
| 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                                   |
| DuraPURE High | ı Capacity                             |                             |                            |                                      |                                         |                                      |
| 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 (CCl4) at 25° C.

# Partial List of Contaminants Best Controlled by Activated Carbon

Acetic acid Allv 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 Cvclohexane Cyclohexylbenzene Decene Dichlorotoluene Dimethyl disulfide Ethoxyethanol

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

Chloroctane Cineole Heptane Indene Isoamyl butrate Limonene LimoneneMethylally alcohol Methylally Butanol Methyl ethyl ketone (MEK) Cvclohexanol 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 Butyl sulfide Carbon disulfide 2-Chloroethanol Chlorotoluene Cresol Heptene Isoamyl acetate Isobutyl propinate Lynaly acetate Methyl acetylsalicyate Methyl cyclohexanol

Methyl propyl ketone Cvclohexanone Decane Dichloroethane Dimethyl disulfide Ethanol Ethynl lactate Ethynl oxalate Ethylcyclohexane Ethylene glycol diethyl ether Nonane **Octene** Pentyl ether Pyridine Tetrachloroethylene Tributylamine Tridecane Methyl pentanone (MIBK) Naphtha Undecane Vinyl toluene



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#### Distributed by

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