

# Product Bulletin for Purafil Purakol Media

**Purakol Media** consists of extruded cylindrical, porous pellets formed from a very high quality virgin activated carbon. No binders are used making the carbon completely available for adsorption of target gases.

Purakol Media has been specially engineered to provide an enhanced adsorptive capacity, assuring the highest overall performance. Purakol media removes contaminant gases with high efficiencies and capacities by means of physical adsorption (physisorption). It is very effective against medium-to-high molecular weight compounds, and chemical contaminants with low volatility.



Purakol Media demonstrates a higher working capacity for broadspectrum contaminant control in applications where multiple contaminant gases are present such as: ozone in outdoor air, and hydrocarbons and nitrogen oxides in automobile & diesel exhaust, volatile organic compounds (VOCs) and other emissions from building materials and office furnishings, and human bioeffluents. Purakol media provides the following minimum removal capacities:

### **Removal Capacities**

| Contaminant Gas                                          | g/cc   | Weight % * |
|----------------------------------------------------------|--------|------------|
| Toluene (C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> ) | 0.1584 | 33.0       |
| Trichloroethane (CH <sub>3</sub> CCl <sub>3</sub> )      | 0.0960 | 20.0       |
| Chlorine (Cl <sub>2</sub> )                              | 0.0480 | 10.0       |
| Nitrogen dioxide (NO <sub>2</sub> )                      | 0.0317 | 6.6        |

<sup>\* 100</sup> pounds (45.36 kg) of Purakol media will remove a minimum of 33 pounds (15 kg) of toluene.

### **Specifications**

| CTC activity            | 60% (min)                             |
|-------------------------|---------------------------------------|
| Hardness number         | 95 (min)                              |
| Moisture                | 2.0% (max)                            |
| Ash content             | 12% (max)                             |
| Bulk density            | 30 lb/ft <sup>3</sup> (0.48 g/cc) ±5% |
| Nominal pellet diameter | 0.16" (4 mm)                          |

#### **Application Guidelines**

| Temperature | -4°F to 125°F (-20°C to 51°C)                            |
|-------------|----------------------------------------------------------|
| Humidity    | 10 - 95% RH                                              |
| Air Speed   | 60 - 500 fpm (0.30 - 2.54 m/s)                           |
| Performance | 99.5% (min)initial removal efficiency in Purafil systems |

## **Product Bulletin for**



### **Purafil Purakol Media**

### **Quality Control**

Each lot of Purakol media is thoroughly tested prior to shipment according to the procedures described in Purafil's ISO 9001 Quality Systems Manual. This testing includes but is not limited to: CTC activity, hardness, bulk density, moisture content, and ash.

### **Disposal**

Purakol media is non-toxic and non-hazardous as supplied. Spent media may exhibit a fairly high BTU value similar to heating values for coal due to adsorption of various organic gases and vapors. As such, it could be could be used as a fuel additive for solid-fueled boilers, or disposed of through incineration. However, in all cases spent Purakol media should be disposed of according to local, state, and federal guidelines.