

# PRODUCT BULLETIN

# **PURAFIL MAKE UP AIR MEDIA (MUA)**

Purafil Make Up Air media provides the following minimum removal capacities:

#### REMOVAL CAPACITY

CONTAMINANT GAS	g/cc	WEIGHT%*
Sulfur dioxide (SO <sub>2</sub> )	0.0485	7.24
Nitrogen dioxide (NO <sub>2</sub> )	0.1093	16.32
Nitric Oxide (NO)	0.0304	4.54
Ozone (O <sub>3</sub> )	0.0699	10.44
Aldehydes (as formaldehyde)	0.0268	4.00
Organic Acids (as acetic)	0.1274	19.01
VOCs / Hydrocarbons	0.0796	11.88

<sup>\*100</sup> pounds (45.36 kg) of Purafil MUA media will remove a minimum of 7.24 pounds (3.28 kg) of sulfur dioxide.

#### **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		



Purafil Make Up Air Media (MUA) is made from an equal mix (by volume) of Purafil SP and activated carbon media. Purafil SP media is generally spherical, porous pellets formed from a combination of activated alumina and other binders, suitably impregnated with sodium permanganate (namno<sub>4</sub>). The sodium permanganate is applied during pellet formation such that it is uniformly distributed throughout the pellet volume and is completely available for reaction with target gases. Our activated carbon media is a pelletized activated carbon with a pore structure that is optimal for the adsorption of a broad range of contaminants and concentrations.

Purafil Make Up Air Media removes the widest variety of chemical contaminants where levels of air pollution from automobile emissions, diesel exhaust and other sources present a risk to human health and well-being. Each type of media targets multiple contaminants or contaminant types specific to motor vehicle exhaust; activated carbon media for removal of sulfur oxides, active sulfur compounds, and organic acids and Purafil SP for removal of nitrogen oxides and formaldehyde - 95% of the total gaseous contaminants found in motor vehicle exhaust.

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Purafil Make Up Air Media has been specially engineered to provide the highest overall performance against multiple contaminants. MUA media removes contaminant gases by chemisorption using adsorption, absorption, and chemical reaction (neutralization and/or oxidation). Harmful gases are trapped and converted into harmless solids, eliminating the possibility of desorption and release back into the air.

Purafil Make Up Air Media demonstrates a higher working capacity for broad-spectrum control of odorous and irritating gases. Purafil Make Up Air media can be used when space within an HVAC system is limited but these individual media are indicated; combining multiple stages of filtration into one. Purafil Make Up Air media is also recommended as a polishing media in general odor control applications.

## **Quality Control**

Each lot of media used in Purafil Makeup Air media is thoroughly tested prior to shipment according to the procedures described in Purafil's ISO 9001 Quality Systems Manual.

### **Media Life Analysis**

Samples of Purafil Make Up Air media should be sent on a regular basis to the Purafil laboratories for testing to determine remaining media life. This provides for scheduled maintenance, avoids downtime, and assures ongoing protection for processes, products, and personnel.

### **Disposal**

Purafil Make Up Air media should be disposed of according to local, state, and federal guidelines.

Purafil Make Up Air media is UL classified for flammability.

ALL PICTURES SHOWN ARE FOR ILLUSTRATION PURPOSE ONLY. ACTUAL PRODUCT MAY VARY DUE TO PRODUCT ENHANCEMENT

