

PRODUCT SPECIFICATION 4

PURAFIL PURACARB® 50/50 MEDIA



PURAFIL PURACARB 50/50 MEDIA is not only recommended for use in Purafil scrubbers, but in virtually all dry-chemical air purification systems designed for removal of acid gases. The media demonstrates a 17% removal capacity for hydrogen sulfide gas, and in retrofit applications, will reduce maintenance costs by extending the period between media changeouts.

MEDIA SPECIFICATION

Puracarb® 50/50 Media is manufactured specifically for the corrosive environments and consists of generally spherical, porous pellets. Composed of carbon, alumina and other binders, Puracarb® 50/50 pellets are impregnated during pellet formation, such that the impregnant is uniformly distributed throughout the pellet volume and is totally available for reaction.

THE CHEMISORPTIVE PROCESS

The Purafil chemisorptive process shall remove contaminant gases by means of adsorption, absorption, and chemical reaction. Gases shall be trapped within the pellet where oxidation changes the gases into harmless solids, eliminating the possibility of desorption.

REMOVAL CAPACITY

Puracarb® 50/50 media shall meet the following removal capacities:

- **HYDROGEN SULFIDE:** 17% minimum by weight
- **SULFUR DIOXIDE:** 5.0% minimum by weight
- **CHLORINE:** 8.0% minimum by weight

For example, 100 pounds (45.36 kg) of Puracarb® 50/50 Media will remove a minimum of 17 pounds (6.35 kg) of hydrogen sulfide.

PHYSICAL PROPERTIES

Puracarb® 50/50 Media shall have the following physical properties:

- **MOISTURE CONTENT:** 35% Maximum
- **BULK DENSITY:** 38 lbs/ft³ (601 kgs/m³)
- **NOMINAL PELLET DIAMETER:** 1/8 " (3.175 mm)

APPLICATION GUIDELINES

Puracarb® 50/50 Media shall perform effectively under the following conditions and guidelines:

- **TEMPERATURE:** -4° F to 125° F
-20° C to 51° C
- **HUMIDITY:** 10 - 95% RH
- **AIRFLOW:** Puracarb® 50/50 Media shall be effective in industrial systems with airflows ranging from less than 25 CFM (42.5 m³/hr) to over 100,000 CFM (169,920 m³/hr) and with velocities from 60 to 500 FPM (1,080 to 9,000 m/hr).
- **MEDIA PERFORMANCE:** Puracarb® 50/50 Media shall be designed for 99.5% min. removal efficiency in Purafil systems.
- **MEDIA LIFE:** Regular media samples of Puracarb® 50/50 Media shall be taken for projecting remaining media life and providing scheduled maintenance and ensuring performance.

INSTALLATION & DISPOSAL REQUIREMENTS

- **INSTALLATION:** Installers shall use dust masks, safety goggles, and rubber gloves.
- **DISPOSAL:** Spent Puracarb® 50/50 Media should be disposed of according to local, state and federal guidelines.

ADVANTAGES

- Non-flammable
- Offers the highest removal capacity for H₂S by weight.
- Protects equipment longer with less frequent media changeouts.
- Compatible for use in virtually any carbon-based air filtration systems

- Non-toxic

TARGET CONTAMINANTS

- Hydrogen sulfide
- Sulfur dioxide
- Volatile organic compounds
- Oxides of nitrogen
- Chlorine