

Product Bulletin for Purafil Puracarb Media

Puracarb Media consists of generally spherical, porous pellets formed from a combination of activated carbon, activated alumina and other binders, suitably impregnated to provide an enhanced removal capacity for acid gases and other corrosive contaminants in industrial environments. Impregnants are applied during pellet formation such that they are uniformly distributed throughout the pellet volume and are completely available for reaction with target gases.



Puracarb Media has been specially engineered to provide an enhanced neutralization potential due to a high reserve alkalinity, thus assuring the highest overall performance. The chemisorptive process removes contaminant gases by means of adsorption, absorption, and chemical reaction (neutralization). Harmful gases are trapped within the pellet and converted into harmless solids which remain in the pellet, eliminating the possibility of desorption and release back into the environment.

Puracarb Media demonstrates a higher working capacity for enhanced control of acid gases in corrosive environments such as pulp & paper mills, refineries, chemical plants, steel mills, aluminum smelters, for the protection of sensitive electronic process control equipment and to protect plant personnel in case of an accidental spill or release. Puracarb media provides the following minimum removal capacities:

Specifications

Moisture	35% (max)
Crush strength	35-70%
Abrasion	4.5% (max)
Bulk density	45 lb/ft ³ (0.72 g/cc) ±5%
Nominal pellet diameter	1/8" (3.175 mm)

Removal Capacities

Contaminant Gas	g/cc	Weight % *
Hydrogen sulfide (H ₂ S)	0.1440	20.0
Sulfur dioxide (SO ₂)	0.0720	10.0
Chlorine (Cl ₂)	0.0720	10.0
Nitric oxide (NO)	0.0187	2.6

* 100 pounds (45.36 kg) of Puracarb media will remove a minimum of 20 pounds (9.07 kg) of hydrogen sulfide.

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

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Quality Control

Each lot of Puracarb 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: bulk density, impregnation level, moisture content, crush strength, and abrasion.

Media Life Analysis

Samples of Puracarb 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

Puracarb media is non-toxic and non-hazardous as supplied. However, in all cases spent Puracarb media should be disposed of according to local, state, and federal guidelines.

Puracarb media is UL 900 classified for flammability