

FORMASORB™ 3MM Impregnated Activated Carbon

DESCRIPTION

FORMASORB™ is a high quality non-chromium impregnated carbon specially developed for the removal of formaldehyde from air. It is manufactured from specific grades of bituminous coal impregnated to produce a high quality carbon that has excellent adsorption properties. **FORMASORB™** is a proven product when used in air filter systems and wherever formaldehyde and general organic aldehydes needs to be removed from the atmosphere.

The base carbon is made from selected grades of coal to create the unique pore structure and superior hardness necessary for the intended service. Activation is controlled to impact a pore structure that will both accept substantial quantities of impregnant and maintain rapid access to do extensive internal surface area for the gas to be treated. The base carbon precursors are impregnated with an oxidative solution to give products with enhanced adsorption characteristics for the intended contaminants.

FORMASORB™ products have been specially developed to meet the increasingly stringent demands of air pollution legislation. The product range has proven successful in a variety of industrial applications including air conditioning systems at hospitals and funeral parlours, general chemical plants and laboratory filter hoods.

FEATURES

FORMASORB™ carbons have several properties that explain their performance in a wide range of applications.

- Selected chemical additives and pore structure for enhanced adsorption capacity and rapid adsorption rates.
- Excellent filling characteristics.
- Superior hardness characteristics.
- Optimal particle size range to minimise pressure drop and maximise adsorption performance.

SELECTION

FORMASORB™ is used in a range of different applications including:

- Hospitals
- Funeral Parlours
- Laboratory fume hoods
- Industrial and chemical processing
- Plastics industry.

For thin bed applications such as cartridges with a bed depth of 10 to 50cm other Mesh and pellet sizes are available on request.

PROPERTIES

SPECIFICATIONS	FORMASORB™ 3mm
Moisture Content, as packed, max., % w/w	20
Impregnant ¹ min., %	4
Carbon Tetrachloride activity (base), min., % w/w	50
Mesh size, US sieve series, % w/w > 8 (2.36 mm) min.	95

(Please refer to the Sales Specification Sheets, which state the Chemviron Carbon test method used to define the above specifications. Copies are available upon request.)

TYPICAL PROPERTIES	FORMASORB™ 3mm
Bed Density ² , kg/m ³	650
Hardness Number, %	95
Mean Particle Diameter, mm	3.5
Moisture content, % w/w	12

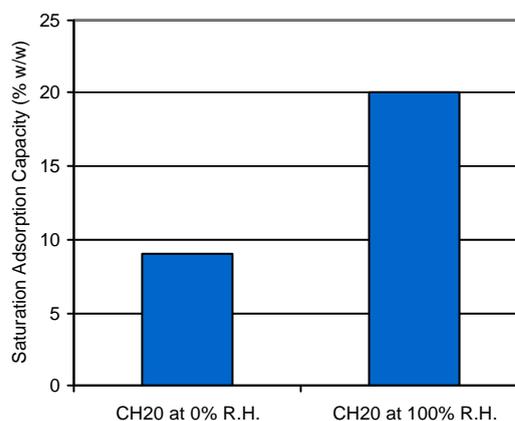
¹ Proprietary Data.

² Bed density is used the adsorber sizing.

EXAMPLE

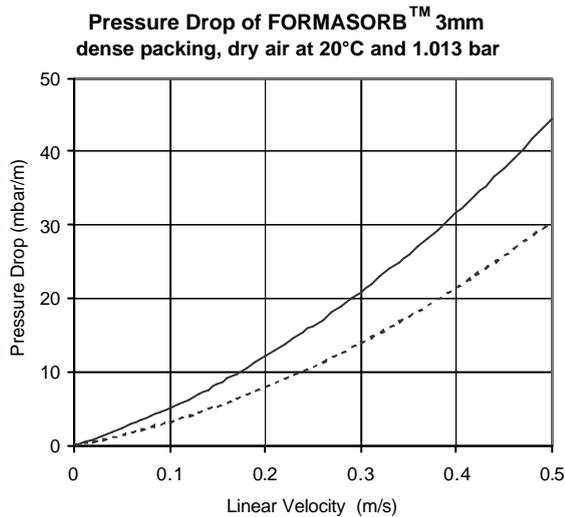
Saturation capacity for Formaldehyde at different relative humidity levels at atmospheric pressure and 20°C.

Typical Formaldehyde Adsorption Capacity
on FORMASORB™



PRESSURE DROP

Pressure drop in air at 20°C is shown on the graph below. This data was obtained with a dense packaging arrangement and should be considered as a maximum for design purposes.



DESIGN INFORMATION

The following are typical design parameters for **FORMASORB™** installed in air treatment filters:

- Superficial Contact Time 1-4s
- Bed depth 0.01-2m
- Linear velocity up to 0.4 m/s

PACKAGING

25Kg bags

SAFETY MESSAGE

Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low-oxygen spaces should be followed.

QUALITY

Each of our worldwide operations has achieved **ISO 9001** certification for their quality management system related to activated carbon. **Chemviron Carbon** guarantees the specifications against representative sampling.

CHEMVIRON CARBON

Chemviron Carbon, the European operation of Calgon Carbon Corporation, is a global manufacturer, supplier, and developer of granular activated carbon, innovative treatment systems, value added technologies, and services for optimising production processes and safely purifying the environment.

With our experience developed since the early years of the twentieth century, facilities around the world and a world-class team of over 1,200 employees, Calgon Carbon Corporation can provide the solutions to your most difficult purification challenges.

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Visit our website at www.chemvironcarbon.com

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