

# Activated Carbon FORMASORB

## Specialty Activated Carbon

FORMASORB is a specialty impregnated, coconut shell-based activated carbon. It was specifically developed for the removal of formaldehyde, which is difficult to remove using other adsorbents, including standard activated carbon. FORMASORB is capable of removing formaldehyde and other aldehydes in trace concentrations from gas streams. It is manufactured by high-temperature steam activation of coconut shells under rigidly controlled conditions, followed by impregnation. The carbon is a proven product for a variety of applications including industrial processes and indoor air quality.

## Specifications

Gas Capacity [ASTM D-3467]	55% w/w Minimum
Moisture Content [ASTM D-2867]	20% w/w Maximum
Particle Size [ASTM D-2862]	4x8, 6x12 US Mesh

## Typical Properties

Ball Pan Hardness [ASTM D-3802]	90
Ash Content [ASTM D-2866] (Base Material)	3% w/w
Surface Area [BSC 90-035]	1150 m <sup>2</sup> /g
Bulk Density [ASTM D-2854]	0.60 g/cm <sup>3</sup>

## Packaging Options

50 Pound bags	Bulk tanker	15 Gallon drum
55 Gallon drum	1,000 Pound bulk sacks	

Unless otherwise specified, particle size distribution will be 5% maximum on the top screen and 5% maximum through the bottom screen. An MSDS is available for all BSC activated carbon products. If the moisture exceeds the referenced value, BSC weight adjusts to the referenced value.

## Test Data

Accelerated column tests were conducted to compare FORMASORB and to a standard coal-based carbon and a competitive product for formaldehyde removal. The testing was conducted under the following conditions:

Influent Concentration: 200 ppmv  
Superficial Velocity: 50 ft/min  
Bed Length: 1.9 inch  
Air Relative Humidity: 25%

The following plot shows breakthrough curves for the three different carbons. As shown, the standard carbon showed immediate breakthrough. Based on these and other data FORMASORB has an estimated capacity for formaldehyde of 4 to 7% by weight.

