

# FILTRASORB® 600-M

## Granular Activated Carbon for Municipal Specifications

### Description

FILTRASORB 600-M is a granular activated carbon (GAC) developed by Calgon Carbon Corporation for the removal of contaminants from municipal drinking water. These contaminants include taste and odor compounds such as MIB and Geosmin, organic compounds known to be precursors to disinfection byproduct (DBP) formation, DBP compounds such as haloacetic acids and trihalomethanes, contaminants of emerging concern (CECs), such as endocrine disrupting compounds (EDCs) and pharmaceutical and personal care products (PPCPs), and other targeted organic contaminants.

This activated carbon is manufactured from select grades of bituminous coal through a process known as reagglomeration to produce a durable granular product capable of withstanding the abrasion associated with repeated backwashing, air scouring, hydraulic transport, and thermal reactivation. Activation is carefully controlled as measured by the iodine number for effective adsorption of a broad range of high and low molecular weight organic contaminants. The higher density of FILTRASORB brand GAC results in a product with both a greater adsorptive capacity on a volume basis and a longer life through multiple reactivation cycles.

FILTRASORB 600-M is designed to comply with all the applicable provisions of the AWWA Standard for Granular Activated Carbon, B604, latest edition, the stringent extractable requirements of ANSI/NSF Standard 61, and the Food Chemicals Codex, latest edition.

### Features

- Calgon Carbon's reagglomerated coal-based granular activated carbons have several properties which provide superior performance in a wide range of applications.
- Produced from a pulverized blend of high quality bituminous coals resulting in a consistent, high quality product.
- The activated carbon granules are uniformly activated through the whole granule, not just the outside. This results in excellent adsorption properties and constant adsorption kinetics in a wide range of applications.
- The reagglomerated structure ensures proper wetting while also eliminating floating material.
- High mechanical strength relative to other raw materials, thereby reducing the generation of fines during backwashing and hydraulic transport.
- Carbon bed segregation is retained after repeated backwashing, ensuring the adsorption profile remains unchanged and therefore maximizing the bed life.
- Reagglomerated with a high abrasion resistance provides excellent reactivation performance.
- High density carbon resulting in a greater adsorption capacity per unit volume.

### Specifications

#### FILTRASORB 600-M

Iodine Number	850 mg/g (min)
Moisture by Weight	2.0% (max)
Abrasion Number	80 (min)
Trace Capacity Number	16 mg/cc (min)
Screen Size by Weight, US Sieve Series	
On 12 mesh	5% (max)
Through 40 mesh	4% (max)

### Typical Properties\*

#### FILTRASORB 600-M

Apparent Density	0.62 g/cc
Ash by Weight	8%
Water Extractables	<1%
Non-Wettable	<1%

\*For general information only, not to be used as purchase specifications.

### Custom Reactivation

Municipal drinking water utilities can extend the life of their FILTRASORB granular activated carbon while lowering their operating costs through participation in Calgon Carbon's Custom Municipal Reactivation (CMR) program.

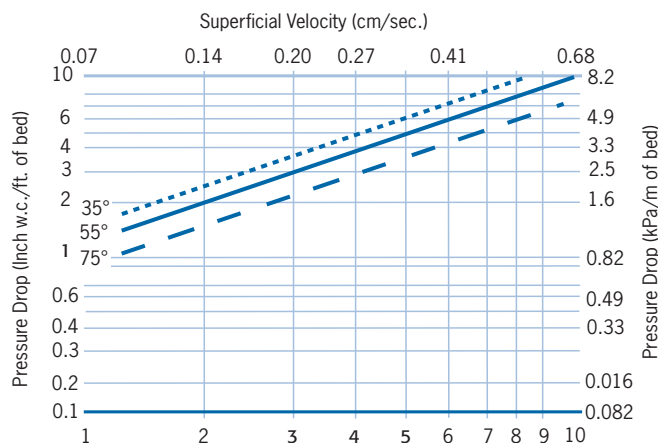
After a granular activated carbon's adsorptive capacity has been exhausted, it can be returned to Calgon Carbon for thermal reactivation (upon carbon acceptance approval). In the reactivation process, the spent activated carbon is heated to a high temperature in furnaces devoid of oxygen, using steam as a selective oxidant. The high temperature reaction with steam serves to restore the adsorptive capacity of the activated carbon.

The CMR program ensures that each customer receives their own GAC back after reactivation. The benefits of using a custom reactivated GAC versus a virgin carbon are several, including: a) economic, as reactivated GAC costs less than virgin GAC, and b) environmental, as use of reactivated GAC conserves natural resources and reduces CO<sub>2</sub> emissions compared to the manufacture of virgin GAC. Another benefit of reactivating and reusing spent granular activated carbon is the ability for customers to ensure for themselves a reliable supply of GAC when needed, as the spent/reactivated carbon represents a renewable resource. Finally, through reactivation, the costs and long-term liability associated with disposal of spent GAC are eliminated.

The combination of high mechanical strength and the dense granular structure of FILTRASORB brand GAC, a product of both the bituminous coal starting material and the reagglomeration manufacturing process, results in a GAC ideal for reactivation, with excellent adsorptive performance and low losses.

## Pressure Drop

Based on Backwashed and Segregated Bed



## Applications

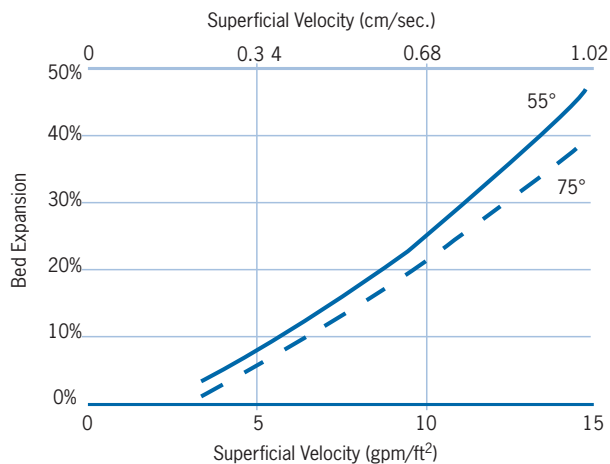
With its enhanced high energy pore structure, FILTRASORB 600-M is ideally suited for trace removal applications and offers a significant performance advantage over traditional activated carbon products used in these types of applications.

Specific applications include:

- Removal of MTBE
- Removal of DBCP
- Removal of THMs
- Removal of pesticides and herbicides
- Removal of other organics at concentrations < 1 ppm
- Potable water treatment
- Groundwater treatment
- Ultrapure water treatment

## Bed Expansion

Based on Backwashed and Segregated Bed



## Packaging

55 lb. (25 kg) poly bag  
1,000 lb. (453.6 kg) super sack  
Bulk trucks

## 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, including all applicable federal and state requirements. Please refer to the MSDS for all up to date product safety information.

Filtrisorb is 100% freshly manufactured virgin granular activated carbon. Recycled granular activated carbon is not used in the production of Filtrasorb.

Making Water and Air Safer and Cleaner



**Corporate Headquarters**  
Calgon Carbon Corporation  
500 Calgon Carbon Drive  
Pittsburgh, PA USA 15205  
800.422.7266  
412.787.6700  
412.787.6713 Fax

[www.calgoncarbon.com](http://www.calgoncarbon.com)

**European Operations**  
Chemviron Carbon Corporation  
Zoning Industriel C de Feluy  
B-7181 Feluy, Belgium  
+ 32 (0) 64 51 18 11  
+ 32 (0) 64 54 15 91 Fax

**Asia Operations**  
Calgon Carbon Asia Pte Ltd.  
9 Temasek Boulevard  
#26-02 Suntec Tower Two  
Singapore 038989  
+65 6221 3500  
+65 6221 3554 Fax

[www.calgoncarbon.com](http://www.calgoncarbon.com)

Your local representative