

# Product Bulletin

## CENTAUR<sup>®</sup> 12X40 GRANULAR ACTIVATED CARBON

### Description

CENTAUR<sup>®</sup> 12X40 is a liquid phase virgin activated carbon that has been manufactured to develop catalytic functionality.<sup>1</sup> The product is unique in that it concentrates reactants via adsorption and then promotes their reaction on the surface of the pores. CENTAUR 12x40 is produced from bituminous coal using a patented process. Although it is not impregnated with metals or alkali, it displays the catalytic functionality of these materials. In most cases, it can be reactivated and does not present the disposal concerns associated with impregnated carbons.

### Applications

CENTAUR 12X40 can be utilized in the liquid phase for the promotion of oxidation, reduction, decomposition, substitution, and elimination reactions. Specific applications include chloramine, hydrogen sulfide, and iron removal from drinking water. This product is particularly suited for use in residential and commercial water filters, for treatment of process water in the bottling and soft drink industries, and for aquarium water treatment. CENTAUR 12x40 combines a fine pore structure for enhanced adsorption of trace contaminants with high catalytic activity for their elimination. Thermal reactivation is an option for recycle and reuse of this product to minimize operating costs and eliminate disposal concerns.

### Design Considerations

CENTAUR 12x40 is intended primarily for use in liquid phase systems to promote catalytic reactions. Depending on the reactant concentrations, the required contact times are usually less than five minutes. The backwashed and drained density of the product is typically 33 lb/ft<sup>3</sup>. For additional information, please contact the Calgon Carbon sales office in your region.

### Packaging

33 lb (15.0 kg) Kraft bags

<sup>1</sup> Purchase of this product from Calgon Carbon Corporation includes a license under the following U.S. Patents: Numbers 5356849 and 5494869

### Properties

Peroxide No.*	19 max
Iodine No., mg/g	825 min
Ash, by weight%	7 max
Moisture, wt%, as packed	3 max
Abrasion No.	75 min
Apparent Density, g/ml	0.56 min

### U.S. Sieve Series

Percent on 12 mesh	5 max
Percent through 40 mesh	4 max

\* Peroxide number utilizes the rate of decomposition of hydrogen peroxide by the carbon and is an indicator of the amount of catalytic activity.

### Manufacturing

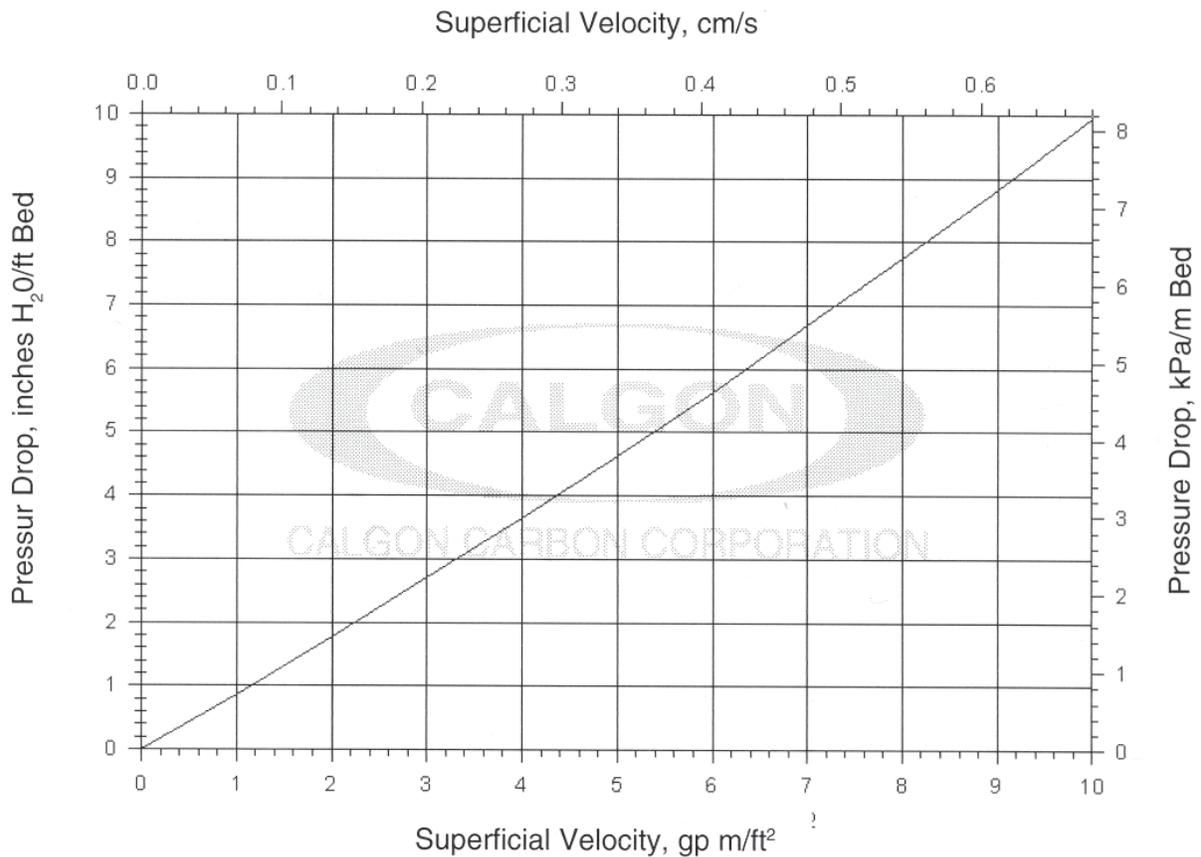
Catlettsburg, KY



Visit our website at [www.calgoncarbon.com](http://www.calgoncarbon.com), or call **1-800-4-CARBON** to learn more about our complete range of products and services, and local contact information.

**Chemviron  
Carbon**

**PRESSURE DROP CURVE  
NOMINAL PRESSURE DROP  
LIQUID DOWN FLOW THROUGH CENTAUR 12x40**



**Features**

- Catalytic Activity
- Not Impregnated
- Improved Trace Organic Capacity
- High Hardness
- Works at Low Oxidant Levels
- Simple Equipment Design
- Reduced Carbon Requirements
- Enhanced Performance

**Benefits**

- Smaller system size; lower capital requirements
- No safety concerns with exotherms or toxicity
- More capacity per unit volume; lower use rates
- Reduced fines and handling losses
- Wide applicability; can eliminate chemical addition
- Reliable; handles spikes in concentration; no metering of chemicals
- Reduces operating costs
- Achieves greater degree of contaminant removal at reduced costs

**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.



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