

# CENTAUR® 12x40

Granular Activated Carbon

#### **Applications**



Industrial Processes



Environmental Water



Pond/ Aquarium/Swim



Landfill Leachate



Bottle & Brewing



Groundwater



Water Processing



Drinking Water (Potable)



Consumer Filtration



CENTAUR 12x40 can be utilized in the liquid phase for the promotion of oxidation, reduction, decomposition, substitution, and elimination reactions. Specific applications include chloramines and hydrogen sulfide removal from potable, process and other waters and peroxide destruction.

CENTAUR 12x40 maximizes reaction kinetics with some increase in pressure drop compared to larger mesh products. The catalytic activity and high trace removal/adsorption ability makes CENTAUR 12x40 a good performer in applications such as the treatment of process water in the bottling and soft drink industries and in treating aquarium water.

#### **Description**

CENTAUR 12x40 is a liquid phase virgin activated carbon that has been manufactured to exhibit enhanced catalytic functionality. 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 CENTAUR 12x40 can be reactivated and does not present the disposal concerns associated with impregnated carbons.

This product complies with ANSI/AWWA B604 (2005) – Granular Activated Carbon and complies with the requirements for activated carbon as defined by the Food Chemicals Codex (FCC) (8th Edition) published by the U.S. Pharmacopeia.

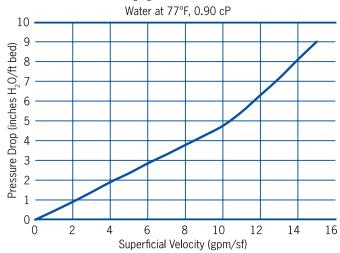
#### Features / Benefits

- Combines a fine pore structure for enhanced adsorption of trace contaminants with high catalytic activity for their elimination
- Not impregnated
- · Improved trace organic capacity
- · High hardness
- Simple equipment design (no pumps or addition of chemicals required)
- Smaller system size as compared to standard carbons; lower capital requirements
- No safety concerns with exotherms or toxicity as with impregnated carbons
- · Wide applicability; can eliminate chemical addition

Specifications	CENTAUR 12x40
lodine Number, mg/g	825 (min)
Ash, wt%	7 (max)
Moisture (As Packaged), wt%	3 (max)
Abrasion Number	75 (min)
Density (Apparent), g/cc	0.56 (min)
Mean Particle Diameter, mm	0.9–1.1
12 US Mesh [1.70mm], wt%	5.0 (max)
<40 US Mesh [0.425mm] (PAN), wt%	4.0 (max)

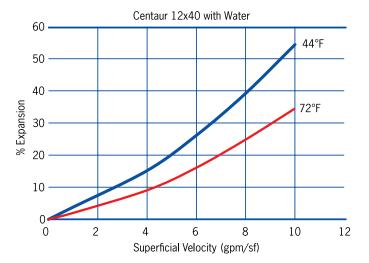
## **Typical Pressure Drop (CENTAUR 12x40)**

Based on a backwashed and segregated bed



Purchase of this product from Calgon Carbon Corporation includes a license under the following U.S. Patents: 5356849 and 5494869

## **Typical Bed Expansion During Backwash**



## **Design Considerations**

CENTAUR 12x40 is intended primarily for use in liquid phase applications where maximization of catalytic reaction is desired. Depending on the reactant type, concentrations and process conditions, the contact time in fixed bed systems is typically less than seven minutes.