

# CENTAUR® 12X40

Granular Activated Carbon

## 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. This product complies with the requirements for activated carbon as defined by the Food Chemicals Codex (FCC) (8th Edition) published by the U.S. Pharmacopeia.

#### Features

- Catalytic activity and adsorptive capability
- Not impregnated
- Improved trace organic capacity
- High hardness
- Product combines a fine pore structure for enhanced adsorption of trace contaminants with high catalytic activity for their elimination
- Simple equipment design (no pumps or addition of chemicals required)

#### **Benefits**

- 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

#### Applications

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.



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

## **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. To determine what is best for your application and assistance with the design, please contact Calgon Carbon Corporation by calling 1-800-4-CARBON.

## Typical Pressure Drop (Centaur 12x40)





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

## Packaging

Please contact Calgon Carbon for options and availability.

#### 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.

#### www.calgoncarbon.com



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

07.071318

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

Your local representative