

# **CENTAUR® NDS 12x40**

Granular Activated Carbon

## Applications









CENTAUR NDS 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 water.

CENTAUR NDS 12x40 maximizes reaction kinetics with some increase in pressure drop compared to larger mesh products. CENTAUR NDS 12x40 can be utilized in applications such as POU (point of use) and POE (point of entry) water filters and dialysis water treatment.

The product is designed to meet the stringent extractable metal requirements of NSF Standard 42 test protocol.

## Description

CENTAUR NDS 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 NDS 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 NDS 12x40 can be reactivated and does not present the disposal concerns associated with impregnated carbons.

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, is certified as a component to the NSF/ANSI 42 – Drinking Water Treatment Units – Aesthetic Effects standard, and meets the requirements for arsenic level for a raw material as defined by the consent judgment dated September 9, 2008 for case number RG08-386432 for California Proposition 65 – Cal. Health & Safety Code §25249.5 et seq.

## **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

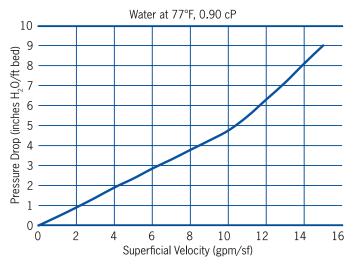
Specifications	CENTAUR NDS 12x40
lodine Number, mg/g	900 (min)
Abrasion Number	75 (min)
pH (Extractable)	5–8
Moisture (As Packaged), wt%	3.0 (max)
NSF 42- Arsenic [As], ppb	10 (max)
NSF 42- Antimony [Sb], ppb	6 (max)
NSF 42- Aluminum [Al], ppb	200 (max)
Prop 65- Arsenic [As], ppb	5 (max)
Prop 65- Antimony [Sb], ppb	3 (max)
Prop 65- Aluminum [Al], ppb	200 (max)
12 US Mesh [1.70 mm], wt%	5 (max)
<40 US Mesh [0.425 mm] (PAN), wt%	4 (max)

#### **Safety Message**

Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed. 1.800.4CARBON calgoncarbon.com © Copyright 2015 Calgon Carbon Corporation, All Rights Reserved DS-CENTNDS12x4015-EIN-E1

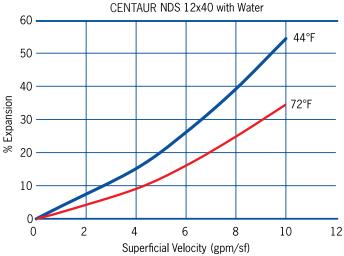
## Typical Pressure Drop (CENTAUR NDS 12x40)

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 NDS 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.

**Safety Message**