CENTAUR® 12x40
Catalytic Granular Activated Carbon

Applications
- Industrial Processes
- Landfill Leachate
- Water Processing
- Wastewater
- Environmental Water
- Bottle & Brewing
- Drinking Water (Potable)
- Pond/Aquarium/Swim
- Groundwater
- Consumer Filtration

CENTAUR 12x40 is a unique catalytic activated carbon that 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.

The catalytic activity and enhanced adsorption ability makes CENTAUR 12x40 a good performer in other 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 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.

The product is unique in that it concentrates reactants via adsorption and then promotes their reaction on the surface of the pores. In most cases CENTAUR 12x40 can be reactivated and does not present the disposal concerns associated with impregnated carbons.


Features / Benefits
- Combines a fine pore structure and high catalytic activity for enhanced adsorption of trace contaminants
- Not impregnated
- 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

<table>
<thead>
<tr>
<th>Specifications</th>
<th>CENTAUR 12x40</th>
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<tbody>
<tr>
<td>Iodine Number, mg/g</td>
<td>825 (min)</td>
</tr>
<tr>
<td>Ash, wt%</td>
<td>7 (max)</td>
</tr>
<tr>
<td>Moisture (As Packaged), wt%</td>
<td>3 (max)</td>
</tr>
<tr>
<td>Abrasion Number</td>
<td>75 (min)</td>
</tr>
<tr>
<td>Density (Apparent), g/cc</td>
<td>0.56 (min)</td>
</tr>
<tr>
<td>Mean Particle Diameter, mm</td>
<td>0.9–1.1</td>
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<tr>
<td>12 US Mesh [1.70mm], wt%</td>
<td>5.0 (max)</td>
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<tr>
<td>&lt;40 US Mesh [0.425mm] (PAN), wt%</td>
<td>4.0 (max)</td>
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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.
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Typical Pressure Drop (CENTAUR 12x40)
Based on a backwashed and segregated bed

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.