

SULFUSORB® 12

Impregnated Granular Activated Carbon



Description

SULFUSORB® 12 is a copper oxide (CuO) impregnated product specifically designed to remove hydrogen sulfide and low molecular weight organic sulfur compounds from gas streams. Hydrogen sulfide is first physically adsorbed into the pores of the activated carbon. It then comes in contact with the CuO, resulting in a chemical reaction which increases the adsorption capacity over non-impregnated activated carbons.

SULFUSORB® 12 may be in-situ regenerated via reversing the chemical reaction by applying energy in the form of heat and oxygen to convert the CuS back to CuO. Since regeneration procedures for desulfurization of activated carbons are unique, it is recommended that Calgon Carbon be contacted for additional information on the regeneration procedures for the specific application. SULFUSORB® 12 is available in two mesh sizes to suit specific design and pressure drop requirements.

Design Considerations

The design of an activated carbon adsorption system is dependent on the adsorbate type, influent concentration, temperature, flow rate, performance objective, and other factors. Calgon Carbon can help evaluate the suitability of activated carbon to satisfy your specific needs and assist in the design of an adsorption system. In addition to the supply of activated carbon, Calgon Carbon offers adsorption systems and other services to meet particular treatment objectives. For additional information on adsorption capacity, please contact the Calgon Carbon Technical Sales Representative for your area.

Applications

Some of the typical applications for SULFUSORB® 12 activated carbon include:

- Odor control
- Product purification
- Natural gas purification
- Corrosion control
- Catalyst guard bed

Packaging

<i>4x10</i>	<i>12x30</i>
230 lb. drum	230 lb. drum 1,000 super sack

Specifications

CuO on Carbon, by weight	12.0% (min)
Moisture, as packed by weight	2.0% (max)
Screen Size, by weight, U.S. Sieve Series	
<i>4 x 10</i>	
On 4 mesh	5.0% (max)
Through 10 mesh	5.0% (max)
<i>12 x 30</i>	
On 12 mesh	5.0% (max)
Through 30 mesh	5.0% (max)

Features

<i>Raw Materials</i>	
Metallurgical grade bituminous coal	
Low ash content coal	
<i>Particle Construction</i>	
Coal is pulverized and reagglomerated with suitable binder	
Granular shape	
<i>Activation Process</i>	
Thermal activation with reducing atmosphere (steam)	
<i>Impregnation</i>	
CuO	

Benefits

<i>Raw Materials</i>	
Produces a strongly adsorbing pore structure for a broad range of contaminants and concentration.	
Higher density results in high volume activity and economical adsorber design.	
Higher purity activated carbon, less ash leaves more carbon structure for adsorption.	
<i>Particle Construction</i>	
Creates optimal transport paths for faster adsorption/desorption, especially important for catalyst and chemical conversion processes.	
Low void fraction; more efficient contact with gas stream.	
<i>Activation Process</i>	
No residual activation chemicals to interfere with application.	
<i>Impregnation</i>	
Increases the adsorption capacity of the activated carbon compared to non-impregnated products.	

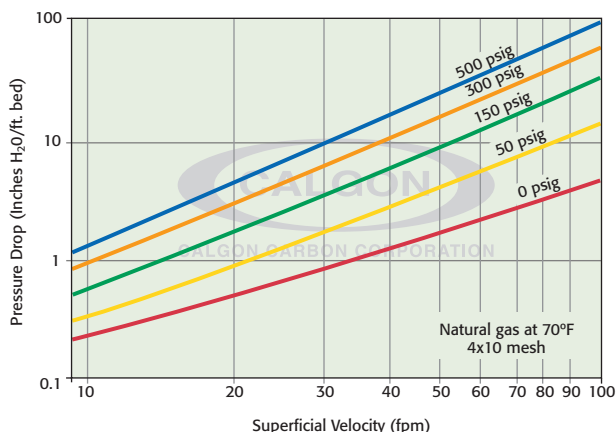
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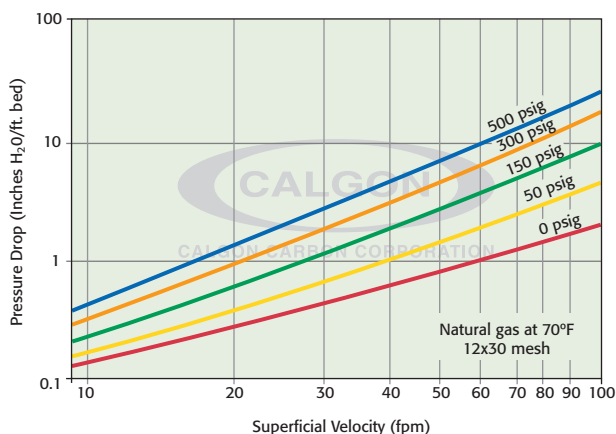
Pressure Drop Curve

Sulfusorb 4x10



Pressure Drop Curve

Sulfusorb 12x30



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.

Limitations of Liability

The Supplier's liability and the Purchaser's exclusive remedy for any cause of action arising out of this transaction, including, but not limited to, breach of warranty, negligence and/or indemnification, is expressly limited to a maximum of the purchase price of spare parts or equipment sold hereunder. All claims of whatsoever nature shall be deemed waived unless made in writing within forty-five (45) days of the occurrence giving rise to the claim. In no event shall the Supplier, for any reason or pursuant to any provision of the warranty, be liable for incidental or consequential damages or damages in excess of the purchase price, nor shall the Supplier be liable for loss of profits or fines imposed by governmental agencies.



CALGON CARBON CORPORATION

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Making Water and Air Safer and Cleaner

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Your local representative

