

# Westates<sup>®</sup> coconut shell based granular activated carbon - VOCarb<sup>®</sup> 36C

## For Gas Phase Adsorption Applications

### Description

VOCarb<sup>®</sup> 36C is a high activity, granular activated carbon that is manufactured from selected grades of coconut shell. The granular shape of this carbon maximizes its geometric surface area, significantly increasing surface and pore diffusion rates and thereby increasing its effectiveness for the adsorption of VOCs with a short contact time. The very high surface area and predominately microporous pore size distribution further enhance the effectiveness of this coconut shell based carbon. In addition, VOCarb<sup>®</sup> carbons also have a high retentivity to hold onto and prevent desorption of previously adsorbed organic compounds. The granular shape of VOCarb<sup>®</sup> 36C results in excellent gas contacting but still allows the carbon bed to operate at pressure drops similar to 4mm pelletized carbons. The high density and superior hardness of VOCarb<sup>®</sup> 36C activated carbon provides excellent resistance to dust and fines formation.

### Applications

Cost effective VOCarb<sup>®</sup> activated carbons developed by Siemens have been demonstrated to provide superior performance in an extensive array of gas phase treatment applications. VOCarb<sup>®</sup> activated carbons are available for:

- Chemical process applications
- VOC control from air strippers, soil vapor extraction and air sparge systems
- Control of tank vent emissions
- HVAC
- Odor control
- Solvent recovery of low boiling point solvents
- Use as a catalyst/catalyst support

## Quality Control

All VOCarb<sup>®</sup> activated carbons are extensively quality checked at our State of California certified environmental and carbon testing laboratory located in Los Angeles, CA. Siemens' laboratory is fully equipped to provide complete quality control analyses using ASTM standard test methods in order to assure the consistent quality of all Westates<sup>®</sup> carbons.

Our technical staff offers hands-on guidance in selecting the most appropriate system, operating conditions and carbon to meet your needs. For more information, contact your nearest Siemens representative.

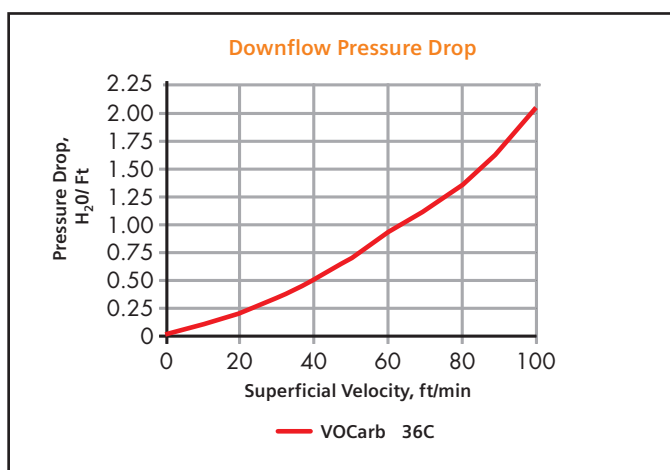


### Features and Benefits

- Exceptionally high VOC adsorption capacity
- Excellent VOC retentivity characteristics, works well for the adsorption of small molecules
- Superior hardness minimizes attrition losses during handling, use and service
- Cost effective
- Easily reactivated for recycle and reuse
- Low pressure drop characteristics (similar to 4mm pelletized carbons)
- Backed by technical support and a strong QA/QC program

Typical Properties	
Parameter	VOCarb® 36C
Carbon Type	Coconut Shell
Mesh Size, U.S. Sieve	3 x 6
Butane Activity <sup>1</sup>	23.5
Hardness No., Wt. %	98
Moisture Content, Wt. %	3
Apparent Density, g/cc	0.45 - 0.51
CTC Activity <sup>1</sup>	60

<sup>1</sup>Butane activity (D5742) has been adopted by ASTM as a replacement for CTC activity (D3467) as a test method for estimating the micropore volume of an activated carbon.



#### Warning

The adsorption of organic compounds onto activated carbon generates heat. In rare instances, adsorbed compounds may also react on the carbon surface to generate additional heat. If these heat sources are not properly dissipated, the carbon bed temperature may rise to the point where the carbon can ignite, leading to a fire or other hazardous condition. A description of industry-accepted engineering practices to assure the dissipation of heat and safe operation of the carbon bed can be provided upon request. In certain applications where the risk of ignition is significant, activated carbon may not be a recommended treatment technology. Please contact your Technical Sales Representative for more details.

Wet activated carbon readily adsorbs atmospheric oxygen. Dangerously low oxygen levels may exist in closed vessels or poorly ventilated storage areas. Workers should follow all applicable state and federal safety guidelines for entering oxygen depleted areas.

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