



### GRANULAR ACTIVATED CARBON CR1230C-AW

CR1230C-AW is an acid-washed granular activated carbon produced from coconut shell by a high temperature activation process under stringent quality control. Acid and water soluble ash constituents have been greatly reduced by the washing process. It has a large surface area, excellent attrition resistance, large pore volume and chemical stability. This product is NSF certified and meets or exceeds all food chemical codex, AWWA and ASTM Protocols.

#### FEATURES AND BENEFITS

- ◆ High adsorption capacity and efficiency
  - ◆ Hard and durable
  - ◆ Highly developed pore structure

---

#### SPECIFICATIONS

US Standard Sieve	
Mesh Size:	12X30
Greater than 12	4% maximum
Less than 30	4% maximum
Iodine Number (mg/g)	1100 minimum
Hardness Number	98 minimum
Moisture (as packed)	5% maximum
Apparent Density (g/cc)	0.51 typical
BackWashed & Drained Density (lb./cf)	28 - 28.5 typical
Total Ash	1-2% typical
Water Soluble Ash	Less than 0.5%
pH	5-8

---

Packaged in 55-pound bags or 1100-pound super sacks.

All of the above test methods are performed using ASTM protocol for granular activated carbon.

This information has been gathered from standard reference materials and/or test data that is assumed to be accurate and reliable. Carbon Resources, LLC, only warrants that this product will meet the above described published specifications and makes no other warranties of any kind either expressed or implied including but not limited to fitness for a particular purpose or application. Buyer assumes all liability and risk that may arise from the use of this product.

## sabre series™ All Grades

### SECTION 1 Chemical Product and Company Information

Carbon Resources, LLC  
2535 Jason Ct.  
Oceanside, CA 92056

Telephone Number: (760) 630-5724 Fax: (760) 630-9930

PRODUCT NAME: sabre series™ All Grades  
CHEMICAL NAME: ACTIVATED CARBON  
CHEMICAL FORMULA: C  
CHEMICAL FAMILY: ACTIVATED CARBON  
PRODUCT USES: VAPOR AND LIQUID FILTRATION APPLICATIONS

### SECTION 2 Composition / Information on Ingredients

Components	CAS#	% by weight	Hazardous
Carbon	7440-440	90-98	Yes*

\*By OSHA definition, 29 CFR 1910.1200 (see section 3 for Hazards identification, Section 8 for exposure guideline and section 15 for other information).

### SECTION 3 Hazards Identification

Black powder, granules or pellets with no odor.

NEVER ENTER A CONFINED SPACE CONTAINING ACTIVATED CARBON SINCE IT CAN ADSORB OXYGEN AND ASPHYXIATION MAY RESULT.

The primary concerns for occupational exposure are skin contact and inhalation in the form of dust. The dust may cause eye irritation, slight skin irritation, and possible respiratory tract irritation that can cause coughing or sneezing.

**SECTION 4 First Aid Measures**

EYES:	Immediately flush with large amount of water.
SKIN:	Immediately flush affected area with water. Wash clothing.
INHALATION:	Remove to fresh air.
INGESTION:	Induce vomiting as directed by medical personnel.

**SECTION 5 Fire Fighting Measures**

Flash Point : N/A  
Ignition Temperature: > 400 C

**Fire and Explosion Hazards:**

When burned, hazardous products of combustion including oxides of carbon can occur. Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.

**Extinguishing Media:**

Dry chemical, water fog, foam or carbon dioxide.

**Fire Fighting Procedures:**

Wear full protective clothing and NIOSH approved self-contained breathing apparatus.

**SECTION 6 Accidental Release Measures****Leak or Spill:**

When leaks or spills occur, clean up in a fashion that does not dissipate dust into air. Manage in accordance with good industrial hygiene and safety practices such as avoiding unnecessary exposure and removal of material from skin, clothing and eyes.

**SECTION 7 Handling and Storage****Storage:**

Product shall be stored in sealed containers in dry, well ventilated area away from strong oxidizers (chlorine, permanganate and ozone, etc.), Ignition sources, combustible materials, and heat.

**Handling:**

Avoid contact with eyes and skin. Avoid scattering of dust into air and breathing of dust. Keep containers dry and closed. Wash skin thoroughly after handling.

**SECTION 8 Exposure Controls / Personal Protection****Respiratory protection:**

Where airborne exposure is probable, use NIOSH approved respiratory protection equipment suitable to the material.

**Skin Protection:**

Avoid skin contact. Wear appropriate dust resistant clothing. Wash clothes and related equipment before reuse. Completely wash skin after handling. Wear gloves and long sleeve shirts to prevent long long term exposure.

**Eye Protection:**

Safety glasses with side panels are required for any form of handling. Provide an eye flushing station nearby.

**Airborne Exposure Guidelines:**

OSHA and ACGIH have not established exposure limits for this material. However, OSHA and ACGIH have established limits for nuisance dusts which are 15 mg/m total dust and 5mg/m respirable dust. The ACGIH TLV/TWA for nuisance dusts called particulates not otherwise classified (PNOC) is 10 mg/m inhalable particulate and 3 mg/m respirable particulate.

**SECTION 9 Physical and Chemical Properties (Typical)**

Boiling Point, C:	N/A	Freezing Point, C:	N/A
Specific Gravity:	0.8-2.1	% Volatiles:	N/A
Vapor Pressure (20 C):	N/A	Solubility (water):	Insoluble
Vapor Density:	N/A	Appearance:	Black powder, granules, or pellets.
Evaporation rate:	N/A	pH:	2.5 - 10
Odor:	None		

**SECTION 10 Stability and Reactivity**

Hazardous Decomposition:

Oxides of carbon (CO & CO<sub>2</sub>).

Hazardous Polymerization:

Does not occur.

Stability:

Activated carbon is determined stable under the outlined conditions of storage, shipment and use.

Incompatibility:

Rapid combustion is possible when in contact with strong oxidizers such as ozone, liquid oxygen, chlorine, etc.

**SECTION 11 Toxicological Information**

Eyes:	Not an eye irritant other than dust
Skin:	Not a primary skin irritant, sensitizing or corrosive agent
Inhalation:	Not established
Ingestion:	Oral LD50 >5g/kg (rats)
Subchronic Effects:	Not established
Tertology (Birth defects)	Not established
Mutagenicity (Genetic effects)	Not established

**SECTION 12 Ecological Information**

## Ecotoxicological information:

Because this material is a relatively inert substance and is insoluble in water, it is not expected to pose significant ecological hazards. The environmental persistence of this material would be primarily based on its physical form, that is, fine particles of this material could be dispersed in the environment by wind and water, while large particles would persist with little dispersion.

## Chemical Fate information:

No data is available

**SECTION 13 Disposal Considerations**

Recover, reclaim or recycle when practical. Activated Carbon alone is not classified as a hazardous waste (activated carbon used to adsorb hazardous substances may become hazardous due to the chemicals it has adsorbed). Dispose of in accordance with federal, state and local regulations.

**SECTION 14 Transport Information**

DOT Name	Not regulated by DOT
DOT Hazard Class / Packing Group	NA
UN Number	NA

Note: sabre series™ activated carbons pass the test for self-heating substances as reflected in the United Nations Recommendations on the Transport of dangerous Goods, manual of Tests and Criteria (see 33.3.1.3.3) and is not considered spontaneously combustible. Therefore, the provisions for shipping activated carbon, class 4.2, in the IATA, ICAO, and IMDG Code publications do not apply to shipments of this material.

08/09



**SECTION 15 Regulatory Information**

## Sara Hazard Classification:

Immediate (Acute) Health:	Yes
Delayed (Chronic) Health:	No
Sudden release of Pressure:	No
Reactive:	No
Fire:	No

## Sara Title III, Section 302:

Does not contain any chemicals under this section.

## Sara Title III, Section 313:

Does not contain any chemicals under this section.

## TSCA:

Activated carbon is tested on the TSCA inventory list.

## U.S. Federal Regulations:

OSHA (29 CFR 1910.1200)	Air contaminate, Table Z-1-A
CERCLA (40 CFR 302.4)	Contains no CERCLA hazardous substance
RCRA (40 CFR 261.33, 261.20-24)	Listed hazardous waste: No