TRAP & TREAT® BOS 200®



Safety Data Sheet

Issued: 06/05/2015 Supersedes: 12/30/2011 Version: 1.0

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

Product identifier 1.1.

Product name : Activated Carbon

Product form : Mixture Product code 3967

Other means of identification **Activated Carbon**

12 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Adsorbent

Details of the supplier of the safety data sheet 1.3.

Calgon Carbon Corporation P.O. Box 717 Pittsburgh, PA 15230 412-787-6700

Emergency telephone number

Emergency number : CHEMTREC (24 HRS): 1-800-424-9300

SECTION 2: Hazards Identification

Classification of the substance or mixture

GHS-US classification

Combustible Dust H232

Not classified as a simple asphyxiant. Product does not displace oxygen in the ambient atmosphere, but slowly adsorbs oxygen from a confined space when wet. Under conditions of anticipated and recommended use, product does not pose an asphyxiation hazard.

2.2. Label elements

GHS-US labeling

Signal word (GHS-US) Warning

Hazard statements (GHS-US) : H232 - May form combustible dust concentrations in air

Other hazards 2.3.

Other hazards not contributing to the

classification

: 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.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/Information on Ingredients

3.1.

Not applicable

Mixture 3.2.

Name	Product identifier	%
Activated Carbon	(CAS No) 7440-44-0	≥ 80
Gypsum (Hydrated calcium sulfate)	(CAS No) 13397-24-5	< 20

SECTION 4: First Aid Measures

Description of first aid measures

: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the First-aid measures general

doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation

: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. First-aid measures after skin contact IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at

least 15 minutes.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison First-aid measures after ingestion control center or medical professional. Get medical attention if you feel unwell.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a s

: Not expected to present a significant hazard under anticipated conditions of normal use. However, dust may cause irritation and redness of the eyes, irritation of the skin and respiratory system. The effects of long-term, low-level exposures to this product have not been

determined.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide. Dry chemical. Foam. Sand.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Dust may be combustible under specific conditions. May be ignited by heat, sparks or flames.

Explosion hazard : Dust may form explosive mixture in air.

Reactivity : No dangerous reactions known under normal conditions of use. Carbon oxides, ammonia, or

toxic halide fumes may be emitted upon combustion of the material.

5.3. Advice for firefighters

Firefighting instructions : Wear NIOSH-approved self-contained breathing apparatus suitable for the surrounding fire.

Use water spray or fog for cooling exposed containers. Evacuate area.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews

properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Product is not soluble, but can cause particulate emission of discharged into waterways. Dike all entrances to sewers and drains to avoid introducing material to waterways. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.

Dispose of material in compliance with local, state, and federal regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust formation. Avoid contact with skin, eyes and clothing. Do not handle until all safety

precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep away from

sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a cool, dry, and well-ventilated place. Keep away from ignition

sources.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Activated Carbon (7440-44-0)*	
OSHA PEL (TWA) (mg/m³)	≤ 5 (Respirable Fraction)
	≤ 15 (Total Dust)

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Gypsum (Hydrated calcium sulfate) (13397-24-5)*	
OSHA PEL (TWA) (mg/m³)	≤ 5 (Respirable Fraction)
	≤ 15 (Total Dust)

^{*}Exposure limits are for inert or nuisance dust. No specific exposure limits have been established for this activated carbon product by OSHA or ACGIH.

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust

ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas. 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.

Personal protective equipment : Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.







Hand protection

 Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or

other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular, powder, or pelletized substance

Color : Black
Odor : Odorless

Odor threshold : No data available pH : No data available Relative evaporation rate (butylacetate=1) : Not applicable Melting point : Not applicable Freezing point : Not applicable Boiling point : Not applicable Flash point : No data available

Auto-ignition temperature : > 220 °C

Decomposition temperature : No data available

Flammability (solid, gas) : > 220 °C

Vapor pressure : Not applicable

Relative vapor density at 20 °C : Not applicable

Apparent density : 0.4 - 0.8 g/cc

Solubility : Carbon and gypsum are insoluble; fertilizer components are soluble

Log Pow : Not applicable
Log Kow : Not applicable
Viscosity, kinematic : Not applicable
Viscosity, dynamic : Not applicable
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and Reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

Possibility of hazardous reactions 10.3

None known.

10.4. Conditions to avoid

Avoid dust formation. Heat. Ignition sources. Exposure to high concentrations of organic compounds may cause bed temperature to rise.

Incompatible materials

Alkali metals. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂). Ammonia. Toxic halide fumes.

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity : Not classified

Activated Carbon (7440-44-0)		
LD50 oral rat	> 2000 mg/kg	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	

Silica: Crystalline, quartz (14808-60-7)

	· ·
IARC group	1 - Carcinogenic to humans

The International Agency for Research on Cancer (IARC) has classified "silica dust, crystalline, in the form of quartz or cristobalite" as carcinogenic to humans (group 1). However these warnings refer to crystalline silica dusts and do not apply to solid activated carbon containing crystalline silica as a naturally occuring, bound impurity. As such, we have not classified this product as a carcinogen in accordance with the US OSHA Hazard Communication Standard (29 CFR §1910.1200) but recommmend that users avoid inhalation of product in a dust form.

: Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified Symptoms/injuries after inhalation : Not classified

Symptoms/injuries Not expected to present a significant hazard under anticipated conditions of normal use.

However, dust may cause irritation and redness of the eyes, irritation of the skin and respiratory

system. The effects of long-term, low-level exposures to this product have not been

determined.

SECTION 12: Ecological information

12.1. **Toxicity**

No additional information available

12.2. Persistence and degradability

No additional information available

Bioaccumulative potential 12.3.

No additional information available

Mobility in soil 12.4.

No additional information available

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal Considerations

Waste treatment methods

Waste treatment and disposal methods

Vacuum or shovel material into a closed container. Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

Additional information

Activated carbon is an adsorbent media: hazard classification is generally determined by the adsorbate. Consult U.S. EPA guidelines listed in 40 CFR 261.3 for more information on hazardous waste disposal.

SECTION 14: Transport Information

14.1. In accordance with DOT

Not classified as hazardous for domestic land transport

UN-No.(DOT) : None on finished product DOT NA no. : None on finished product

Proper Shipping Name (DOT) : Not regulated

Department of Transportation (DOT) Hazard

Classes

: None on finished product

Hazard labels (DOT) : None on finished product Packing group (DOT) : None on finished product DOT Quantity Limitations Passenger aircraft/rail : None on finished product

(49 CFR 173.27)

14.2. Transport by sea

Not classified as hazardous for water transport

IMO / IMDG

UN/NA Identification Number : None on finished product

UN- Proper Shipping Name : Not regulated

Transport Hazard Class : None on finished product

14.3. Air transport

Not classified as hazardous for air transport

ICAO / IATA

UN/NA No : None on finished product

UN- Proper Shipping Name : Not regulated

Transport Hazard Class : None on finished product **Packing Group** : None on finished product Marine Pollutant : None on finished product

14.4. Additional information

Other information

: Under the UN classification for activated carbon, all activated carbons have been identified as a class 4.2 product. However, this product type or an equivalent has been tested according to the <u>United Nations Transport of Dangerous Goods</u> test protocol for a "self-heating substance" (United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Section 33.3.1.6 - Test N.4 - Test Method for Self Heating Substances) and it has been specifically determined that this product type or an equivalent does not meet the definition of a DOT self-heating substance (class 4.2) or any other hazard class.

SECTION 15: Regulatory Information

15.1. US Federal regulations

Activated	Carbon	Profile	85

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt.

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard

Cobalt (7440-48-4)*

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

0.1%

15.2. International regulations

No additional information available

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SARA Section 313 - Emission Reporting *Present below de minimis level

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15.3. US State regulations

California Proposition 65

WARNING: This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, birth defects, or other reproductive harm.

Silica: Crystalline, qua	artz (14808-60-7)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	NA
Cobalt (7440-48-4)			'	
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	NA
Titanium dioxide (1340	63-67-7)		'	
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	NA

Aluminum oxide (1344-28-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right to Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

Calcium sulfate (7778-18-9)

- U.S. Massachusetts Right to Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Silica: Crystalline, quartz (14808-60-7)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right to Know List

Gypsum (Hydrated calcium sulfate) (13397-24-5)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Ammonium Nitrate (6484-52-2)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List

Limestone (1317-65-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: Other Information

Indication of changes : Revision 1.0: New SDS Created.

Revision Date : 06/05/2015
Other information : Author: CJS.
For internal use only : PR #85

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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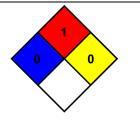
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NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : 0
Flammability : 1
Physical : 0
Personal Protection : :

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The information is this document applies to this specific material as supplied. It may not be valid if product is used in combination with other materials. It is the user's responsibility to determine the suitability and completeness of this information for their particular use. While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Calgon Carbon Corporation makes no warranty with respect to the same, and disclaims all liability for reliance thereon.