Revision: February 14, 2020

1 Identification
· Product identifier
 Trade name: <u>Charcoal, Activated Carbon</u> Product code: CH2675 CAS Number: 7440-44-0
 Recommended use and restriction on use Recommended use: Laboratory chemicals Restrictions on use: No relevant information available.
 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291
• Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International)
2 Hazard(s) identification
Classification of the substance or mixture Combustible Dust May form combustible dust concentrations in air.
 Label elements GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms: None. Signal word: Warning Hazard statements: May form combustible dust concentrations in air. Precautionary statements: None. Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

[•] Chemical characterization: Substances

· CAS No. Description

7440-44-0 carbon

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: February 14, 2020

Trade name: Charcoal, Activated Carbon

(Cont'd. of page 1)

4 First-aid measures Description of first aid measures · General information: No special measures required. • After inhalation: Supply fresh air; consult doctor in case of complaints. · After skin contact: Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor. • After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help. · Most important symptoms and effects, both acute and delayed: Gastric or intestinal disorders when ingested. Mechanical irritation to eyes. · Danger: No relevant information available. · Indication of any immediate medical attention and special treatment needed: If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

Extinguishing media

• Suitable extinguishing agents: Use fire fighting measures that suit the environment.

• For safety reasons unsuitable extinguishing agents: No relevant information available.

• Special hazards arising from the substance or mixture

May form combustible dust concentrations in air.

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation.

Use personal protective equipment as required.

Environmental precautions No special measures required.

Methods and material for containment and cleaning up

Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

(Cont'd. on page 3)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: February 14, 2020

Trade name: Charcoal, Activated Carbon

(Cont'd. of page 2)

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

· Handling

· Precautions for safe handling:

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. Use only in well ventilated areas.

· Information about protection against explosions and fires: Keep ignition sources away.

[•] Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

• Further information about storage conditions: Keep containers tightly sealed.

· Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· Engineering controls: Provide adequate ventilation.

• Breathing equipment: Use suitable respiratory protective device when high concentrations are present.

Protection of hands:



Protective gloves

• Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

(Cont'd. on page 4)

Revision: February 14, 2020

Trade name: Charcoal, Activated Carbon

(Cont'd. of page 3)

· **Body protection:** Protective work clothing

Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties				
 Information on basic physical and Appearance: 	d chemical properties			
Form: Color: · Odor:	Powder Black			
· Odor: · Odor threshold:	Not determined. Not determined.			
 pH-value: Melting point/Melting range: Boiling point/Boiling range: 	Not applicable. ~3,550 °C (~38.450 °F) 4,827 °C (40.727 °F)			
· Flash point:	The product is not flammable.			
· Flammability (solid, gaseous):	Product is not flammable.			
· Auto-ignition temperature:	Not determined.			
· Decomposition temperature:	Not determined.			
· Danger of explosion:	Product does not present an explosion hazard.			
 Explosion limits Lower: Upper: Oxidizing properties: 	Not determined. Not determined. Not determined.			
· Vapor pressure:	Not determined.			
· Density at 20 °C (68 °F):	1 g/cm³ (8.35 lbs/gal)			
 Bulk density: Relative density: Vapor density: Evaporation rate: 	150 kg/m ³ Not determined. Not applicable. Not applicable.			
 Solubility in / Miscibility with Water: 	Insoluble.			
• Partition coefficient (n-octanol/water)	: Not determined.			
 Viscosity Dynamic: Kinematic: Other information 	Not applicable. Not applicable. No relevant information available.			

10 Stability and reactivity

(Cont'd. on page 5)

Revision: February 14, 2020

ade name: Charcoal, Activated Carbon	
	(Cont'd. of page
 Reactivity: The product is non-reactive under normal conditions of use, storage ar Chemical stability: Stable under normal temperatures and pressures. Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications. 	nd transport.
Possibility of hazardous reactions Reacts with strong oxidizing agents.	
May form combustible dust concentrations in air. • Conditions to avoid Moisture.	
Prevent formation of dust. Keep ignition sources away - Do not smoke. · Incompatible materials	
Strong oxidizers such as perchlorates, bromates, and nitrates; hydrofluoric acid. • Hazardous decomposition products Under fire conditions only:	
Carbon monoxide and carbon dioxide	
Toxicological information	
 Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: None. 	
· Acute toxicity:	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information 	available.
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information Repeated dose toxicity: No relevant information available. 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information Repeated dose toxicity: No relevant information available. Germ cell mutagenicity: Based on available data, the classification criteria are not 	
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information Repeated dose toxicity: No relevant information available. Germ cell mutagenicity: Based on available data, the classification criteria are not met. 	met.
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information Repeated dose toxicity: No relevant information available. Germ cell mutagenicity: Based on available data, the classification criteria are not met. 	met. net.
 Acute toxicity: LD/LC50 values that are relevant for classification: None. Primary irritant effect: On the skin: Based on available data, the classification criteria are not met. On the eye: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. IARC (International Agency for Research on Cancer): Substance is not listed. NTP (National Toxicology Program): Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed. Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information Repeated dose toxicity: No relevant information available. Germ cell mutagenicity: Based on available data, the classification criteria are not met. 	met. net. met.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: February 14, 2020

Trade name: Charcoal, Activated Carbon

(Cont'd. of page 5)

12 Ecological information

[·] Toxicity

· Aquatic toxicity No relevant information available.

- Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.

• Mobility in soil: No relevant information available.

- [•] Additional ecological information
- · General notes: Generally not hazardous for water.
- · Other adverse effects No relevant information available.

13 Disposal considerations

[•] Waste treatment methods

· Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

[·] Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

4 Transport information		
[·] UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
[·] UN proper shipping name · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
 Transport hazard class(es) 		
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.	
 Packing group DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.	
· Environmental hazards	Not applicable.	
· Special precautions for user	Not applicable.	
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	x II of Not applicable.	

15 Regulatory information

 Safety, health and environmental regulations/legislation specific for the substance or mixture

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: February 14, 2020

	(Cont'd. of pa
	Inited States (USA)
	SARA
	Section 302 (extremely hazardous substances):
_	Substance is not listed.
	Section 313 (Specific toxic chemical listings):
S	Substance is not listed.
	SCA (Toxic Substances Control Act)
7	2440-44-0 carbon
Ρ	Proposition 65 (California)
С	Chemicals known to cause cancer:
S	Substance is not listed.
С	Chemicals known to cause developmental toxicity for females:
S	Substance is not listed.
С	Chemicals known to cause developmental toxicity for males:
S	Substance is not listed.
С	Chemicals known to cause developmental toxicity:
S	Substance is not listed.
Ε	PA (Environmental Protection Agency):
S	Substance is not listed.
1/	ARC (International Agency for Research on Cancer):
S	Substance is not listed.
С	Canadian Domestic Substances List (DSL):
S	Substance is not listed.
C	Other information

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

(Cont'd. on page 8)

Revision: February 14, 2020

Trade name: Charcoal, Activated Carbon

(Cont'd. of page 7)

978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers

SDS Prepared by: ChemTel 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtel.com