

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Activated Carbon
CAS number	7440-44-0
Synonyms	Activated Charcoal; Charcoal Black

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

Identified uses	Laboratory chemicals.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Respiratory Irritation	Category 3
Eye Irritation	Category 2A

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

Dust causes respiratory, skin, and eye irritation.
Prolonged or repeated inhalation or ingestion can cause irritation of mucous membranes.
Wet activated carbon removes oxygen from air causing a severe hazard to workers in enclosed or confined space.

Precautionary statements

Prevention: Avoid generation of dust during handling. The dust may be more susceptible to catalytic reaction than the large mesh product. Avoid breathing dust. Wash thoroughly after handling. Use in a well-ventilated area. Avoid release to environment.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention for any breathing difficulty.

IF IN EYES: Rinse cautiously with water for several minutes. Seek medical attention if irritation persists.

IF IN CONTACT WITH SKIN: Remove contaminated clothing. Rinse cautiously with soap and water for several minutes. Seek medical attention if irritation persists.

IF INGESTED: Drink a large volume of water; seek medical attention.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Activated Charcoal	Activated Carbon; Charcoal Black	7440-44-0	<=100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

Remove to fresh air. Administer first aid as appropriate. Seek medical attention.

- In case of skin contact** Wash thoroughly with soap and water. If irritation persists, seek medical attention.
- In case of eye contact** Flush with lukewarm water for at least 15 minutes. Lift upper and lower eye lids occasionally. Seek medical attention.
- If swallowed** Do not induce vomiting. Dilute by giving water or milk. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The effects of chronic and sub-chronic exposure have not been determined. Safe handling on a long-term basis should emphasize protection against respective or long-term exposure to carbon dust inhalation and avoidance of contact to any liquids that may leach off the impregnated carbon. Affected individuals with pre-existing conditions pertaining to digestive, respiratory, skin, or eye problems can be more susceptible to potential effects of carbon dust.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Alcohol foam, CO₂, dry chemical, water.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Carbon monoxide and Carbon dioxide gas may be generated during combustion. Caution is advised. Contact of activated carbon with strong oxidizers, such as ozone or liquid oxygen, may cause rapid combustion. Fire is possible at elevated temperatures or by contact with an ignition with most types of organic solids. Activated carbon is difficult to ignite, and when it does, it has a tendency to burn or smolder very slowly without any smoke or flame.

5.3 Special protective equipment and precautions for firefighters

Firefighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

5.4 Further information

Flash Point No information available.

Autoignition Temperature > 220 °C

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment, keep unnecessary personnel away, and ventilate area of spill.

6.2 Environmental precautions

The product is not soluble in water; however, dust particles can cause a particulate emission if discharged to waterways. Block all entrances to sewers and drains to avoid introducing the material into the waterways.

6.3 Methods and materials for containment and cleaning up

Block all entrances to sewers and drains. Vacuum, shovel, or sweep up spilled material, neutralize, and place in closed container for disposal. Do not release to sewer or waterway. Remove product to appropriate storage area until it can be properly disposed of in accordance with local, state, and federal regulations. Avoid formation of dust.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones. Keep away from ignition sources. Use in well-ventilated areas. Protect containers from physical damage. Avoid prolonged contact with eyes and skin. Prevent or minimize exposures to dusts by using appropriate personal protection equipment. Wash exposed skin areas thoroughly with soap and water after handling.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Dry airtight storage recommended. Store in cool, dry, well-ventilated area and in closed containers. Maintain good housekeeping.

Incompatibilities

Store away from strong oxidizers, such as ozone, liquid oxygen, chlorine, permanganate, etc. Keep away from heat or flames or ignition sources.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

Airborne Exposure Guidelines: Recommended Exposure Limits (8-hr TWA)

Component	Type	Value
Activated Carbon	Total Dust	10 mg/m ³ *
	Respirable Fraction	3 mg/m ³ *

*OSHA and ACGIH have not established specific exposure limits for this material. The recommended exposure limits for these activated carbon products are based on the Threshold Limit Values adopted by ACGIH for Particulates (insoluble) Not Otherwise Classified. The OSHA PEL for Nuisance Dust is 15 mg/m³ (5 mg/m³ respirable fraction).

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air. Note: Wet activated carbon removes oxygen from air causing a severe hazard to workers in enclosed or confined space. If risk of overexposure exists, wear an approved respirator. Provide adequate ventilation in warehouse or closed storage area.

Personal protective equipment

Eye/face protection

Safety glasses or goggles with side shields are recommended for any type of handling. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended. Have eye flushing equipment available.

Skin protection

Avoid contact with the skin. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling. Protective gloves are recommended.

Body Protection

Wear long sleeve shirt or lab coat and/or other protective clothing/equipment as determined appropriate.

Respiratory protection

Use NIOSH/MSHA approved respiratory protection equipment appropriate to the material and/or its concentration where airborne exposure is likely. If exposures cannot be kept to a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Ventilation is essential in confined areas.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Black, granular powder
Odor	None
Odor Threshold	No information available
pH	7-10
Melting Point/Range	No information available
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	Insoluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	> 220 °C
Decomposition Temp	No information available
Viscosity	Not applicable
Molecular Formula	C
Molecular Weight	12.01 g/mol
VOC Content(%)	No information available
Oxidizing properties	Not oxidizing

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid

Avoid dust formation. Protect from moisture. Excess heat.

10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

No information available.

Skin corrosion/irritation

Carbon is non-toxic through skin absorption. Dust may cause mild irritation/reddening.

Serious eye damage/eye irritation

The physical nature of carbon may cause eye irritation. Dust may cause mild irritation/reddening.

Respiratory or skin sensitization

The physical nature of carbon may irritate the respiratory system. Dust may cause mild irritation to the upper respiratory tract.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Activated carbon	7440-44-0	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)	Not regulated.
IMDG	Not regulated.
IATA	Not regulated.

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not applicable.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
No SARA Hazards.

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

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SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.