MATERIAL SAFETY DATA SHEET CHARCOAL, ACTIVATED, AQUARIUM MSDS

1: Chemical Product and Company Identification

Product Name: Charcoal, Activated, Aquarium
Catalogue Codes: SLC1549
CAS#: 7440-44-0
RTECS: FL7243500
TSCA: TSCA 8(b) inventory: Charcoal, Activated
CI#: Not available.
Synonym: Charcoal, activated, Norite, Aquarium, 4-8 mesh
Chemical Name: Charcoal, Activated
Chemical Formula: C

2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Charcoal, Activated	7440-44-0	100

Toxicological Data on Ingredients: Charcoal, Activated LD50: Not available. LC50: Not available.

3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to mucous membranes. The substance may be toxic to lungs. Repeated or prolonged exposure to the substance can produce target organs damage.

4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact: Not available.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.
Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion: Not available.

5: Fire and Explosion Data

Flammability of the Product:	Flammable.
Auto-Ignition Temperature:	452°C (845.6°F)
Flash Points:	Not available.
Flammable Limits:	Not available.
Products of Combustion:	Not available.
Fire Hazards in Presence of Various Substances:	Highly flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances:	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions:	Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards:	Flammable/combustible material. May be ignited by friction, heat, sparks, or flames. May reignite after fire is extinguished. Freshly prepared material may heat spontaneously in air, and presence of water accelerates this.
Special Remarks on Explosion Hazards:	Material in powder form, capable of creating a dust explosion (forming explosive mixtures in air) when exposed to heat, flame, or ammonium nitrate + heat. ammonium tetrachloride at 240 C, bromates, Ca(OCl)2, chlorates, Cl2, (Cl2 + Cr(OCl)2), ClO, F2, iodates, IO5, (Pb(NO3)2, HgNO3, HNO3, (oils + air), (potassium + air), Na2S, Zn(NO3)2.

6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill: Spontaneously combustible solid. Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Obtain advice on use of water as spilled material may react with it. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Cover with wet earth, sand or other non-combustible material. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7: Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust.Keep away from incompatibles such as oxidizing agents, metals, acids.
Storage: Store in a segregated and approved area. Keep in a cool and ventilated area away from combustible materials. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

8: Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits: TWA: 3.5 (mg/m3) from ACGIH (TLV) [United States] TWA: 4 (mg/m3) [United Kingdom (UK)] Inhalation Respirable. TWA: 10 (mg/m3) [United Kingdom (UK)] Inhalation Total. TWA: 2 (mg/m3) [Canada] Inhalation Respirable. Consult local authorities for acceptable exposure limits.

9: Physical and Chemical Properties

Physical state and appearance:	Solid. (Granular solid.)
odour:	Odourless.
Taste:	Not available.
Molecular Weight:	12.01 g/mole
Colour:	Black
pH (1% soln/water):	Not applicable.
Boiling Point:	Not available.
Melting Point:	3500°C (6332°F)
Critical Temperature:	6810°C (12290°F)
Specific Gravity:	3.51 (Water = 1)
Vapor Pressure:	Not applicable.
Vapor Density:	Not available.
Volatility:	Not available.
odour Threshold:	Not available.
Water/Oil Dist. Coeff.:	Not available.
Iconicity (in Water):	Not available.
Dispersion Properties:	Not available.
Solubility:	Insoluble in cold water, hot water.

10: Stability and Reactivity Data

Stability:	The product is stable.
Instability Temperature:	Not available.
Conditions of Instability:	Heat, ignition sources (flames, sparks), air, incompatible materials
Incompatibility with various substances:	Reactive with oxidizing agents, metals, acids.
Corrosivity:	Non-corrosive in presence of glass.
Special Remarks on Reactivity:	Incompatible with air, unsaturated oils, 2-Nitrobenzaldehyde, strong oxidizers such as fluorine, chlorine trifluoride, and potassium peroxide.
Special Remarks on Corrosivity:	Not available.
Polymerization:	Will not occur.

11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Causes damage to the following organs: mucous membranes. May cause damage to the following organs: lungs.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: May cause skin irritation.

Eyes: May cause eye irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: May cause aspiration pneumonitis, vomiting, decreased gastrointestinal transit time, gastrointestinal obstruction, constipation, a charcoal-containing empyema, intestinal perforation, charcoal deposits in the oesophageal and gastric mucosa, rectal ulcer.

Chronic Potential Health Effects: Skin: Chronic skin exposure can result in clogging of hair follicles, rendering them black. Inhalation: Chronic inhalation can cause carbon particles to accumulate in the lungs. It may cause a pneumoconiosis called "Black Lung Disease" or "Coal Workers Pneumoconiosis". This is seen in coal workers, but no evidence has been found for the equivalent with occupational exposure to activated carbon (charcoal).

12: Ecological Information

Ecotoxicity:	Not available.
BOD5 and COD:	Not available.
Products of Biodegradation:	Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation:	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation:	Not available.

13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14: Transport Information

DOT Classification: Not Regulated.

Identification: Activated carbon (Not DOT Regulated).

Special Provisions for Transport: Not available.

15: Other Regulatory Information

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

16: Other Information

References: Not available.

Other Special Considerations: Not available.

EXCLUSION OF LIABILITY

All information and instructions provided in this Material Safety Data Sheet in respect of the substance is given solely in terms of the provisions of the Occupational Health and Safety Act No 85 of 1993 and Regulations ("the Act"), is based on scientific and technical knowledge as at the date indicated on this MS Material Safety Data Sheet and is presented in good faith to be correct.
The information and instructions provided in this MSDS apply only to the substance in its present form and not to any formulation or mix, in which event it is the sole responsibility of the user of the substance as formulated and/or mixed to investigate and establish any danger which may arise out of its use, wherever such user may be situated.

It is the sole responsibility of the person in receipt of this Material Safety Data Sheet wherever such recipient may be situated, to ensure that the information provided is communicated to and understood by any person who may come in contact with the substance in any place and in any manner whatsoever. If such recipient produces formulations or mixes using the substance, then it is such recipient's sole responsibility to comply with the provisions of the Act in respect of the provision of the necessary Material Safety Data Sheet, or to comply with any other applicable legislation.