Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

**Product Name:** Coconut Shell Charcoal

**Manufacturer / Supplier:**
Saigon Materials Co., Ltd
SAGOMA
20/21 Dinh Bo Linh Str., Ward 24
Binh Thanh, HCMC, VIET NAM
Tel: 84-8-35117098
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**Catalog Codes:** SGM-001
**CAS#:** 68647-86-9

**Synonym:** Coconut Shell Carbon
**Chemical Name:** Charcoal, coconut shell
**Chemical Formula:** C

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charcoal, coconut shell</td>
<td>68647-86-9</td>
<td>90 ~ 100</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

**Hazardous Ingredients:** This particular form of carbon is prepared by dehydration reaction process. Testing using methods in 49 CFR 173 Appendix E has shown the product does not meet the definition of Hazard Class 4.2. This product is classified as Non-Hazardous by criteria specified in 29 CFR 1910.1200 (Hazard Communication)

**Health Hazards:** May be irritating to eyes, skin and respiratory tract. SKIN: Prolonged or repeated contact may cause dryness or chapping of exposed area. Chronic skin exposure may discolor the hair follicle. EYES: Carbon particles may cause physical irritation. INHALATION: Overexposure may cause irritation to respiratory system due to carbon deposition in the lung and the respiratory tract. INGESTION: Ingestion may cause gastrointestinal irritation, vomiting and constipation.

Section 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.

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### Section 5: Fire and Explosion Data

**Flammability of the Product:** Flammable.

**Auto-Ignition Temperature:** 450°C (842°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:**
Use media for class A fires: Foam, multipurpose dry chemical and water type extinguishers. 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.

**Fire Fighting Instruction:**
Fire-fighters should wear full protective clothing, including self contained breathing apparatus. Avoid direct steam at pressure on the carbon to prevent dispersal of smouldering particles which could spread the fire.

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### Section 6: Accidental Release Measures

**Breakage and Spill:** Use appropriate tools to put the breakage/spilled solid in a convenient container. Eliminate all ignition sources. Cover with wet earth, sand or other non-combustible material.

**Inhalation:** If exposed to excessive levels of dusts or fumes, remove to fresh air.

**Ingestion:** For excessive ingestion, drink water or milk, never give anything by mouth to an unconscious person.
**Section 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).

**Section 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.

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:**
This product is non-hazardous and exposed to the atmosphere for more than 24 hours before packing. Avoid exposure to dust levels above 15 (mg/m3). Consult local authorities for acceptable exposure limits.

**Section 9: Physical and Chemical Properties**

**Physical state and appearance:** Solid

**Odor:** Odorless.

**Taste:** Not available.

**Molecular Weight:** 12.01 g/mole

**Color:** 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.

**Volutility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.
Dispersion Properties: Not available.

Solubility: Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (flames, sparks), incompatible materials

Incompatibility with various substances: Hydrocarbon like oils, gasoline, diesel fuel, grease, paint thinner.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 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 esophageal 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.

Section 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.
Section 13: Disposal Considerations

**Waste Disposal:**
Waste must be disposed of in accordance with state or local environmental control regulations.

Section 14: Transport Information

This product is non-hazardous and exposed to the atmosphere for more than 24 hours before packing. It is therefore excluded from IATA #395, IMCO class 4.2 or UN 1362. Freight classification: NMFC #40560, UFC #20640. This product is therefore acceptable or carriage by SEA, ROAD or AIR.

Section 15: Other Regulatory Information

**Other Regulations:**

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

**Storage Procedure:**
This product must be stored tightly closed in well ventilated and dry warehouses in secure packaging which precludes moisture and atmospheric contaminants. Precautions must be taken to avoid direct contact with hydrocarbons like oils, gasoline, diesel fuel, grease, paint thinners etc. as mixing of carbon with hydrocarbons may cause spontaneous combustion.

**Handling:**
Direct body should be minimised as good hygienic practice.

*The information contained herein is based on data considered accurate in light of current formulation. However, we make no warranty of merchantability or any other warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.*

Section 16: Other Information

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