Catalytic Coconut Shell GAC
SAFETY DATA SHEET

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1. Chemical Product & Company Identification

PRODUCT NAME: Catalytic Carbon

APPLICATION: Filtration of (suspended Solids ≤ 1 Micron), Humic Substances (organics), Tannins and Lignin, Color and Odor, Hydrogen sulfide (H2S), Chloromines, Trihalomethanes (THMs), Phenols and p-nitro Phenol, All kind of Dyes, Heavy metals (Inorganic) including Arsenate, Arsenide, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury and Selenium from Drinking Water and Wastewater.

2. Composition/Information on Ingredients

Chemical Characterization: Granular Activated Carbon coated with Iron Hydroxide.

Component	Chemical Composition	Formula	CAS#	Conc. w/w
GAC	Carbon	C	7440-44-0	>85%
Iron Hydroxide	Iron Hydroxide	FeO(OH)	20344-49-4	<15%

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non hazardous and/or present at amounts below reportable limits.

3. Hazards Identification

Classification of the substance or mixture

- **Classification according to Regulation (EC) No. 1272/2008**
  This product does not require labeling or classification according to 2008/1272/EC.
- **Classification according to Directives 67/548/EEC and 1999/45/EC**
  This product does not require labeling or classification according to Directive 67/548/EEC or 1999/45/EC.

Labeling:

- **Labeling according to Regulation (EC) No 1272/2008**
  This product does not require labeling according to 2008/1272/EC.
- **Labeling according to Directive 67/548/EEC or 1999/45/EC**
  This product does not require labeling according to 67/548/EEC or 1999/45/EC

Emergency Overview

Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract.

Potential health effects:

- **Inhalation:**

  May cause mild irritation to the respiratory tract.

- **Ingestion:**

  Not expected to be a health hazard via ingestion. This product can cause mild irritation of gastrointestinal tract if swallowed in small amounts. Large amounts may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain, diarrhea.

- **Skin Contact:**

  May cause mild irritation.

- **Eye Contact:**

  May cause irritation of eyes. Abrasive action of dust particulate may damage eye.

- **Aggravation of Pre-existing Conditions:**

  Contact may aggravate disorders of the eyes, skin, central nervous system disorders, gastrointestinal tract, and respiratory system (such as bronchitis, emphysema and asthma).

4. First-Aid Measures

General Information: Take off contaminated clothes. Wash immediately with plenty of water. Continue rinsing for at least 10 minutes. If any symptom persists, seek medical attention.

Eye Contact: Rinse immediately with plenty of running water. Continue for at least 15 minutes. Seek medical advice if the irritation persists.

Skin Contact: If irritation occurs wash immediately with plenty of water and non-abrasive soap. Continue for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Inhalation: Remove patient to fresh air, allow to rest and keep warm. In case of unconsciousness place patient stably in side position for transportation. Obtain medical advice.

Ingestion: First rinse mouth with water. Immediately give 1-2 glasses of water, if victim is fully conscious. Seek medical attention.

5. Fire Fighting Measures

- Not considered to be a fire hazard. However, the material contains carbon may increase the burning rate of combustibles

- **Ignition Temperature:** ≥ 350°C

- **Hazardous combustion products:** Material will burn in a fire, releasing combustion products of carbon monoxide and carbon dioxide.

- **General hazards:** Other material adsorbed onto the carbon may also be released.

- **Extinguishing media:** Water fog, foam, dry chemical.

- **Firefighting equipment:** Self-contained breathing apparatus and full body protective clothing.

6. Accidental Release Measures

- Contain the discharged material.
- **Personal precautions:** Wear eye protection and protective clothing.
- **Environmental precautions:** Keep out of drains and water courses.
- **Methods for cleaning up:** Vacuum or sweep up material and placed in a designated waste container. Avoid dust formation.
- **Disposal method:** The material be disposed in accordance with applicable local, state and federal regulations.

7. Handling and Storage

Handling: Normal chemical handling. Dust mask should be used when large quantities are used in the absence of good local exhaust ventilation. Avoid the formation and deposition of dust. Take precautionary measures to avoid static charges. Wash hands after handling.

Storage: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Store in a cool, dry area. Keep container closed when not in use. Product or component is a powerful oxidizer, hence it should not be stored near organic matter or other strong reductive substances or incompatible materials such as hydrogen peroxide and sodium peroxide. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Control/Personal Protection

Exposure Limit: no specific value; the national exposure limit for dust should be observed.

Personal Protective Equipment:

- **Ventilation System:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

- **Respiratory Protection (NIOSH Approved):** If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

- **Eye Protection:** Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

- **Skin Protection:** Wear appropriate protective clothing. Avoid skin contact with the spilled product.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

9. Physical and Chemical Properties

General Information	
Physical State	Solid
Appearance	Reddish Black Granules
Odor	Odorless
Granule Size	0.6-2.4 mm
Ignition Temperature	>350°C
Melting Point	N/A
Bulk Density	630-635 kg/m^3
Solubility in water at 20° C	Not Soluble

10. Stability and Reactivity

Chemical Stability: Stable

Conditions to avoid: Heat and ignition sources, strong oxidizers and combustible materials.

Hazardous decomposition products: CO, CO2

Hazardous polymerization: None

11. Toxicological Information

Information on toxicological effects

Toxicity to Animals: Acute oral toxicity (LD50) 50,000 mg/kg [Rat}

Chronic effects on Humans: Not available

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: Not available

12. Ecological Information

- **Eco toxicity:** No Data Available
- **Environmental Fate:** No Data Available

The product has not been tested. The statement has been derived from the properties of the individual components.

13. Disposal Considerations

General Information: This product is manufactured. Is not a RCRA, listed hazardous waste and does not exhibit any characteristics of a hazardous waste, including toxicity.

Component Waste number: No EPA Waste Numbers are applicable for these products components.

Recommendation: Disposal must be made per official regulations.

Disposal Method: This product is generally suitable for landfill disposal. Follow all applicable Federal, St ate, and local laws, rules, and regulations regarding the proper disposal of this material. If this product has been altered or contaminated with other hazardous materials, appropriate waste analysis may be necessary to determine proper method for disposal. A qualified environmental professional should determine waste characterization, disposal, and treatment methods for this material in accordance with applicable Federal, State and local regulations and requirements. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

- **Land Transport (ADR/RID/AND):** Not classified as dangerous good under transport regulations.

- **Sea Transport (IMDG/IMO):** Not classified as dangerous good under transport regulations.

- **Air Transport (IATA/ICAO):** Not classified as dangerous good under transport regulations.

Catalytic Carbon is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Labeling per Regulation (EC) No 1272/2008

The substance does not require classification or labeling under the CLP regulation.

Not listed or not regulated by the following inventories: CDTA, Chemical Weapon Convention
NFPA Ratings

Component	CAS #	Health	Flammability	Reactivity	Others
GAC	7440-44-0	0	1	0	-
Iron hydroxide	20344-49-4	1	0	0	alkaline

16. Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship.

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