



Active Char Products Private Limited

B-No 615, Industrial Development Area, Binanipuram, Edayar, Edayar, Ernakulam 683 502, Kerala, India

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1. THE PRODUCT AND THE INFORMATION OF THE COMPANY

Supplier Name:

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Edayar, Edayar, Ernakulam 683 502, Kerala, India

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COOCNUT SHELL BASED STEAM ACTIVATED CARBON

2. INGREDIENTS / COMPOSITION

Identity : Activated Carbon

CAS No : 7440-44-0

Percentage (%) : 100

3. HAZARDS IDENTIFICATION

Odourless black granules or powder. Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result. When workers enter a vessel containing activated carbon, follow procedures for potentially low oxygen. Workers should also take appropriate precautions when dealing with spent (used) activated carbons which may exhibit properties of adsorbed materials.

POTENTIAL HEALTH EFFECTS:

Medical conditions aggravated by exposure: None documented

Routes of Exposure:

Eyes: • Not corrosive, but like most particulate materials, may cause mild physical irritation.

Skin: • Not corrosive and not a primary skin irritant. Mild irritation is possible due to abrasive action of dust.

Ingestion: • No known deleterious effects.

Inhalation: • Possible mild irritation of respiratory tract due to drying and abrasive actions of dust.

Chronic Effects: • IARC: Not listed • NTP: Not listed • OSHA: Not regulated

For additional information, see Section 16.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water. Seek medical attention if irritation persists.

Skin: Wash with soap and water to avoid drying and chapping of skin.

Inhalation: Remove victim to fresh air. Apply resuscitation if victim is not breathing. Seek medical attention if irritation Persists.

5. FIRE FIGHTING MEASURES

Flashpoint • Not Applicable.

Non-flammable • 16CFR1500.44.

Not Self Heating • UN Manual of Tests and Criteria, Test N.3.

Flammability Limits in Air • LFL and UFL Not Applicable.

GENERAL HAZARD:

Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame.

Toxic gases will form upon combustion.

FIRE FIGHTING INSTRUCTIONS:

If possible to do safely, move smoldering activated carbon to a non-hazardous area, preferably out of doors. Extinguish Fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.

FIRE FIGHTING EQUIPMENT:

If possible to do safely, move smoldering activated carbon to a non-hazardous area, preferably out of doors. Extinguish Fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.

FIRE FIGHTING EQUIPMENT:

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

HAZARDOUS COMBUSTION PRODUCTS:

Combustion products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smolder for long periods in enclosed spaces, may produce amounts of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air). Under certain conditions, any airborne dust may be an explosion hazard. Used activated carbon may produce additional combustion products. Firefighting instruction: Fire fighters should wear full protective clothing including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

IF A SPILL OR LEAK OCCURS:

Clean up spills in a manner that does not disperse dust into the air. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal of material from eyes, skin, and clothing.

DISPOSAL METHOD:

Spent granular activated carbon may be recyclable. Dispose of virgin (unused) carbon (waste or spillage) in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws.

CONTAINER DISPOSAL:

Do not reuse empty bags. Dispose of in facility permitted for non-hazardous wastes.

7. HANDLING AND STORAGE

Storage Temperature: • Ambient

Storage Pressure: • Atmospheric

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.
- Prevent or minimize exposures to dusts by using appropriate personal protection equipment.
- Wash exposed skin areas thoroughly with soap and water after handling.

Storage: • Store product in a closed dry container. Maintain good housekeeping. Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: • Use local exhaust ventilation to control emissions near the source. Ventilation systems should be sized and configured to prevent exceedance of recommended or regulated exposure limits (for example, OSHA PELs). Eye Protection: • Safety glasses 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. 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.

Airborne Exposure Guidelines:

Recommended Exposure Limits 8-hr TWA	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).

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point, C: • NA Freezing Point, C: • NA

Bulk Density - Granular Grades • 28-34 lbs/ft³ % Volatiles • NA

Bulk Density - Powder Grades • 15-35 lbs/ft³ Solubility in Water • Insoluble

Vapor Pressure • NA Appearance and Odor • Black granules or

Vapor Density • NA powder with no odor

Evaporation Rate • NA

NA - Not applicable

10. STABILITY AND REACTIVITY

The product is stable and non reactive at normal atmosphere condition and room temperature.

11. TOXICOLOGICAL INFORMATION

This material is non-toxic in its original state. Used activated carbon may exhibit characteristics of the adsorbed material.

12. ECOLOGICAL INFORMATION

This material, in its original state, is not harmful to the environment. Used activated carbon may exhibit characteristics of the adsorbed material.

13. DISPOSAL AND / or ELIMINATION (REMOVAL) OF WAST

Activated carbon, in its original state, is not a hazardous material or hazardous waste. Follow applicable governmental regulations for waste disposal. Used activated carbon may become classified as a hazardous waste depending upon the application.

Follow applicable regulations for disposal.

Recycling (reactivation) may be a viable alternative to disposal. Contact M/s Active Char products Pvt Limited for information.

14. TRANSPORTAT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name: • Activated carbon (Not DOT Regulated).

Hazard Class: • Not applicable.

UN/NA Number: • Not applicable.

Packing Group: • Not applicable.

Freight Classification: • STCC Code - #2899643 NMFC #040560

15. REGULATORY INFORMATION

FEDERAL REGULATIONS:

OSHA Hazard Communication • See "Particulates not otherwise regulated," in Table Z-1, Standard, 29CFR1910.1200: of 29CFR1910.1000, "Limits For Air Contaminates".

CERCLA/SUPERFUND, 40CFR117, 302: • Notification of spills of this material is not required.

SARA/SUPERFUND: • Amendments and Reauthorization Act of 1986 (Title III), Sections 302, and 313:.

• SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40CFR355):

This product is not listed as an extremely hazardous substance.

• SECTION 313 - LIST OF TOXIC CHEMICALS: This product is not listed.

Toxic Substances Control Act, 40CFR710: • Activated carbon is on the inventory list.

Resource Conservation and Recovery Act: • This product, in its original state, does not meet the criteria of hazardous waste.

STATE REGULATIONS:

California Occupational Safety and Health: • Not listed.

Massachusetts Substance List: • Not listed.

New Jersey Right-to-Know: • Not listed.

Pennsylvania Right-to-Know: •

Component name: Steam Activated Carbon

16. OTHER INFORMATION

Activated carbon can be safely stored in any normal storage area, but away from sources of direct heat.

WARNING: Activated carbon (especially when wet) can deplete oxygen from the air, and dangerously low levels of Oxygen may result. When workers enter a vessel containing activated carbon, procedures for potentially low oxygen areas should be followed.

Activated carbons are not listed as potential carcinogens by any agency. Because M/s Active Char Products Pvt Limited adheres to a very Conservative position regarding all health and safety matters, we recommend and follow a practice of requiring respiratory protection whenever there is any evidence of airborne dust.

The information herein is given in good faith but no warranty, expressed or implied, is made