Material Safety Data Sheet

Activated Carbon Powdered (RXSOL-26-3107-555)

1. Product and Company Identifaction

Product Name	RXSOL-26-3107-055
Product Type	Activated Carbon

Company Details:

RX MARINE INTERNATIONAL
105, A wing, BSEL, TECH PARK.
VASHI, NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Kolkata, Chennai, Vizag, Fujairah, Muscat

Phone	+91 22 65113333 / 5555 / 9999 / 27611360
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

INGREDIENTS.

Chemical Name (CAS)	%	PEL(OSHA)	TLV(ACGIH)	Other
Carbon (7440-44-0)	100	N/A	N/A	N/A

*ACGIH (TWA) for reparable dust is 2.5 mg/m3

There are no established PEL, TWA or TLV values for this material. Caution should be taken for respirable dust. The product has no known carcinogenic properties.

3. Hazards Identification

HEALTH HAZARD DATA:
Route (s) of Entry:

Ingestion: Carbon is non-toxic through ingestion
Inhalation: The physical nature of carbon may irritate the respiratory system
Skin: Carbon is non-toxic through skin absorption.
Eye Irritation: The physical nature of carbon may cause, eye irritation.

4. First Aid Measures

EMERGENCY & EIRST AID PROCEDURES:
In case of inhalation remove to fresh air. Administer first aid as appropriate. Seek medical attention.
In ease off ingestion do not induce vomiting. Dilute by giving water or milk. Seek medical attention.
Skin Contact: Wash thoroughly with water. If irritation persists seek medical attention.
In case of eye contact flush with lukewarm water for at least 15 minutes. Seek medical attention.
OTHER:
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.

5. Fire-fighting Measures

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 (smoulder) without producing smoke or flame. Toxic gases will form upon combustion.

FIRE FIGHTING INSTRUCTIONS:
If possible to do safely, move smouldering 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:
Firefighting 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.

6. Accidental Release Measures

Fire Explosion Data
Flash Point: N/A
Extinguishing media: Alcohol foam, CO2, dry chemical, water.
Special Firefighting procedures: Exercise caution when responding to any chemical fire. Respiratory Protection is essential

Unusual fire & explosion hazards: Contact of activated carbon with strong oxidizers may cause rapid combustion.
Contact of Phosphoric acid with certain metals may liberate hydrogen which is flammable and readily forms explosive mixtures in air.

Decomposition Products: CO may be formed in the fire.
Thermal Decomposition: Sulfur Oxides (SOx)

7. Handling and Storage

STORAGE AND HANDLING INFORMATION:
Storage Temperature: Ambient
Storage Pressure: Atmospheric
Handling: Follow good handling and housekeeping practices to minimize spills, generation of airborne dust, and accumulation of dust on exposed surfaces.
Use with adequate exhaust ventilation to draw dust away from workers' breathing zones.
Prevent or minimize exposures to dust by using appropriate personal protective equipment.
Wash exposed skin areas thoroughly with soap and water after handling.

Storage: Dry airtight storage recommended. Maintain good housekeeping. Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc.

8. Exposure controls and personal protection

SPECIAL PROTECTION INFORMATION:
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/Local Exhaust: Essential in confined areas.
Eye 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.
Engineering Controls: Use local exhaust ventilation to control emissions near the source. Ventilation systems should be sized and configured to prevent exceeding of recommended or regulated exposure limits. 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 Recommended
Hygienic Practices: Wash thoroughly after handling.
Airborne Exposure Guidelines:

Recommended Exposure Limits Activated Carbon
8-hr TWA
Total Dust 10 mg/m3*
Respirable Fraction 3 mg/m3*

*OSHA and ACGIH have not established specific exposure limits for this material. The recommended exposure limits for these activated carbon products are base 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

PHYSICAL DATA:

Specific Gravity, (H2O = 1):	3.5
Solubility in water:	Insoluble
Apparent Density:	0.45 - 0.50 g/cc
Vapor Pressure:	N/A
Melting Point:	N/A
Boiling Point:	N/A
Freezing Point:	N/A
Appearance and Odor:	Black granular, powder or extruded pellet, no odor

10. Stability and reactivity

Incompatibility.	Avoid strong oxidizers and liquid acids.
Stable:	Yes
Conditions to avoid:	None
Hazardous Decomposition Products:	Oxides of Carbon
Hazardous Polymerization:	Will not occur

11. Toxicological information

ECOLOGICAL AND TOXICOLOGICAL INFORMATION
This material, in its original state, is not harmful to the environment. Used activated carbon may exhibit characteristics of the adsorbed material.
This material is non-toxic in its original state. Used activated carbon may exhibit characteristics of the adsorbed material.

12. Ecological information

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: • Not listed.

13. Disposal considerations

HMIS INDEX:
HMIS Index details are as follows,

HEALTH:	0
FLAMMABILITY:	1
REACTIVITY:	1
PPE:	E

14. Transport information

DOT (Department of Transportation)

Proper Shipping (Article) Name:	Steam Activated Carbon, Non-Regulated OR Carbon, Activated, Non-Regulated
Shipping Class:	Class 70
Hazard Class:	Not applicable.
UN/NA Number:	Not applicable.

Packing Group: Not applicable.
Freight Classification: STCC Code - #2899643 / NMFC #040560
DOT Marking: N/A
DOT Placard: N/A
Precautions to be taken in Transportation: N/A

15. Regulatory information

Precautions to be taken

in handling and storage: Avoid excessive contact with moisture.Activated carbon can be safely stored in any normal storage area, but away from sources of direct heat.

Other precautions: Wet activated carbon depletes oxygen from the air creating a severe hazard to workers in enclosed or confined spaces, sampling and work procedures for low oxygen levels should be taken whenever workers entering carbon vessels, enclosed or confined spaces.

16. Other information

KEEP OUT OF REACH OF CHILDREN
Although the information and recommendations set forth in this sheet are believed to be correct as of the date hereof, RX MARINE International. makes no representation as to the completeness or accuracy of such information and recommendations. RX MARINE International. shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or use of or reliance upon such information and recommendations. You are encouraged to advise anyone working with or exposed to such products of the information
contained herein. No Warranty, either expressed or implied, of merchantability or fitness or of any other nature with respect to the product or to the information and recommendations herein made hereunder.