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BROMOBENZENE

MATERIAL SAFETY DATA SHEET

Supplier	: Bharat Rasayan Limited 1501, Vikram Tower, Rajendra Place, New Delhi – 110008, INDIA
Emergency Phones	: +91-11-43661120,1104 Fax 43661100

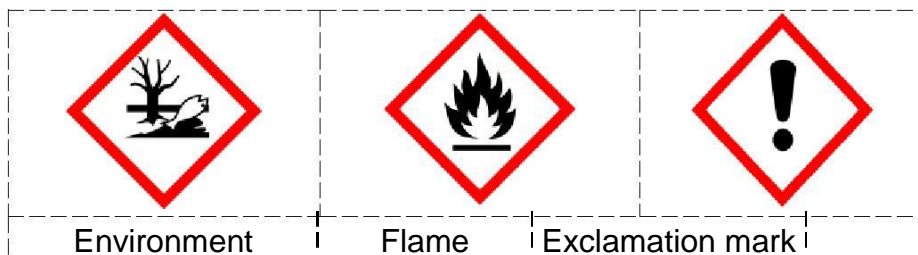
1. **PRODUCT IDENTIFICATION**

Product	Bromobenzene
Intended Use	Raw material for pesticide manufacture
Chemical name	Bromobenzene
Chemical formula	C ₆ H ₅ Br
CAS No.	108-86-1

2. HAZARDOUS IDENTIFICATION

Flam. Liq. 3	H226
Skin Irrit. 2	H315
Aquatic Chronic 2	H411

Hazard pictogram:



Signal Word: Warning

3. CHEMICAL COMPOSITION

Chemical Name	Content (%w/w)
Bromobenzene	99.50 % min
Other associated impurities	0.5% max

4. FIRST AID MEASURES

Eyes:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Warm water must be used. Get medical attention immediately.

Skin:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Notes to Physician:

Section 5 - Fire Fighting Measures.

Antidote:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media	: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective. Do NOT use straight streams of water.
Fire & explosion hazards	: Special Hazards of Combustion Products: Irritating hydrogen bromide and other gases may be produced in fire.
Fire-fighting equipment	: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Containers may explode in the heat of a fire. This chemical poses an explosion hazard. Flammable liquid and vapor.

6. ACCIDENTAL RELEASE MEASURES

Action to take for spills/leaks	:	Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Large Spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.
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7. HANDLING AND STORAGE

Handling	:	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.
Storage	:	Store in a segregated and approved area. 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	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.
Personal protection	: Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Freezing point	:	-30.6°C (-23.1°F)
Solubility in water	:	Insoluble
Specific Gravity	:	1.49
Appearance	:	Liquid
Odor	:	Not available
Vapour Pressure	:	0.7 kPa at 20 °C
Flash Point	:	51 °C min

10. STABILITY AND REACTIVITY

Stability	:	The product is stable
Incompatibility	:	Strong oxidizing agents.
Hazardous decomposition products	:	Carbon monoxide, carbon dioxide, hydrogen bromide

11. TOXICOLOGICAL INFORMATION

Eyes	:	Not available
Skin irritation	:	Not available
Oral	:	Oral, rat: LD50 = 2383 mg/kg
Dermal	:	LD50 rabbit: 3300 mg/kg
Inhalation	:	Not available
Skin sensitization	:	Not available

12. ECOLOGICAL INFORMATION

Toxicity to Fish	:	Fish: Fathead Minnow: LC50: 35.7mg/l; 96h
Toxicity to Bacteria	:	Bacteria: Phytobacterium phosphoreum: EC50 = 9.46 mg/L; 30 minutes
Toxicity to algae	:	No data available

Toxicity to Daphnia	: No data available
Toxicity to birds	: No data available

13. DISPOSAL CONSIDERATIONS

Disposal Method	: Dispose of in a manner consistent with federal, state, and local regulations.
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ADR/RID Classification	
Proper shipping Name	Bromobenzene
UN No.	2514
Packing Group	III
Hazard Class	3
IMDG Classification	
Proper shipping Name	Bromobenzene
UN No.	2514
Packing Group	III
Hazard Class	3

IATA/ICAO Classification	
Proper shipping Name	Bromobenzene
UN No.	2514
Packing Group	III
Hazard Class	3

15. REGULATORY INFORMATION



H-Phrase	H226: Flammable liquid and vapour H315: Causes skin irritation H411: Toxic to aquatic life with long-lasting effects
Signal word	Warning

16. OTHER INFORMATION

This MSDS summarizes best knowledge of the health and safety hazard information of the product. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. The responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Date : 21/ 03/ 2017