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MATERIAL SAFETY DATA SHEET

Version Number:- 02

PRODUCT NAME: BROMOFORM

1. IDENTIFICATION:		
Product Code	:	90645
Company Name	:	ADVENT CHEMBIO PRIVATE LIMITED
Address	:	W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701, MAHARASHTRA, INDIA.
E-mail	:	sales@adventchembio.com
WEBSITE	:	www.adventchembio.com
Company Phone Number	:	<u>+91 77770 84837</u>
2. HAZARDS IDENTIFICATIO	N:	
Hazard classification		
Physical hazards		
Flammable liquids	:	Category 3
Health hazards		
Acute toxicity	:	Category 4 (Harmful if swallowed)
Acute toxicity	:	Category 3 (Toxic if inhaled)
Skin irritation	:	Category 2 (Causes skin irritation)
Eye irritation	:	Category 2 (Causes serious eye irritation)
Long-term (chronic) aquatic hazard	:	Category 2 (Toxic to aquatic life with long lasting effects)
Labels elements	:	
Hazard symbol	:	
Signal word	:	Danger
Hazard statement	:	Highly flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. Toxic to aquatic life with long lasting effects.
Precautionary statement		
Prevention	:	Obtain special instructions before use. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face protection. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.



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PRODUCT NAME: BROMOFORM CAS Number: 75-25-2 Keep container tightly closed. Ground/ bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Response : IF exposed or concerned: Get medical advice/ attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a poison center or doctor/physician. Storage : Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Disposal Dispose of contents/container to an appropriate treatment and disposal facility in : accordance with applicable laws and regulations, and product characteristics at time of disposal. Other hazards which do not : This substance/mixture contains no components considered to be either persistent, result in GHS classification bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. COMPOSITION/ INFORMATION ON INGRADIENTS:					
Ingredient	CAS Number	Percent	Hazardous		
Bromoform	75-25-2	NLT 98.0%	Yes		
4. FIRST AID MEASURES:					
General information	: Get medical advice/atte attendance.	ntion if you feel unwell. Show this	safety data sheet to the doctor in		
Ingestion	: If vomiting occurs, keep Move to fresh air. Call a	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Move to fresh air. Call a physician or poison control center immediately. If breathing stops,			
Inhalation	Get medical attention if	tion. If breathing is difficult, give ox symptoms persist.	ygen.		
Skin contact	: Immediately flush with	plenty of water for at least 15 minu	tes. Get medical attention.		
Eye contact	Immediately flush with lienses. Get medical atte	plenty of water for at least 15 minu ntion.	tes. If easy to do, remove contact		
Most important symptoms/effects, acute and delayed	: The most important knc	own symptoms and effects are desc	ribed in the labelling.		



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Indication of immediate medical attention and special treatment needed	:	No data available.
5. FIRE FIGHTING MEASUR	ES:	
General information	:	Flammable liquid and vapor.
Suitable (and unsuitable) ext	tingı	Jishing media
Suitable extinguishing media	:	Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	:	For this substance/mixture no limitations of extinguishing agents are given.
Specific hazards arising from the chemical	:	Carbon oxides, Hydrogen bromide gas, Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.
Special protective equipment	it an	d precautions for firefighters
Special firefighting procedures Special protective	:	Fight fire from a protected location. Move containers from fire area if you can do so without risk. Firefighters must use standard protective equipment including flame retardant coat, helmet
equipment for fire-fighters	:	with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
6. ACCIDENTAL RELEASE M	IEAS	URES:
Personal precautions, protective equipment and emergency procedures	:	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate
		protective clothing. Keep unauthorized personnel away.
Methods and material for containment and cleaning up	:	protective clothing. Keep unauthorized personnel away. Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal
containment and cleaning	:	Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do
containment and cleaning up Notification Procedures	: : : 3E:	Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.



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Conditions for safe storage, including any incompatibilities	and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Was thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed well-ventilated place. Ground container and transfer equipment to eliminate static sparks.	in a dry,
8. EXPOSURE CONTROLS PE	SONAL PROTECTION:	
Appropriate engineering controls	: No data available	
Individual protection measur	s, such as personal protective equipment	
General information	Good general ventilation (typically 10 air changes per hour) should be used. Ver rates should be matched to conditions. If applicable, use process enclosures, local ventilation, or other engineering controls to maintain airborne levels below recom- exposure limits. If exposure limits have not been established, maintain airborne leve acceptable level. An eye wash and safety shower must be available in the immedia area. Use explosion-proof ventilation equipment.	exhaust mended els to an
Eye/face protection	Wear safety glasses with side shields (or goggles).	
Hand protection	Chemical resistant gloves.	
Other	. Wear suitable protective clothing.	
Respiratory protection	Recommended Filter type: Filter A for vapours of organic compounds.	
Hygiene measures	Always observe good personal hygiene measures, such as washing after hand material and before eating, drinking, and/or smoking. Routinely wash work cloth protective equipment to remove contaminants. Provide eyewash station and safety Avoid contact with eyes, skin, and clothing.	ing and

9. PHYSICAL AND CHEMICAL PROPERTIES:		
Appearance	: Clear, colourless to yellow heavy liquid	
Odor	: No data available	
Solubility	: No data available	
Formula	: CHBr ₃	
Molecular Weight	: 252.73 g/mol	
Density	: 2.88 - 2.90 g/cm3 at 20°C	
рН	: No data available	
% Volatiles by volume @ 21C (70F)	: No data available	
Boiling Point	: 146 - 150 °C	



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Melting Point	:	5-8°C
Flash Point	:	41.3 °C
Vapor Density (Air=1)	:	No data available
Vapor Pressure	:	6.7 @ 20°C
Evaporation Rate (BuAc=1)	:	No data available
10. STABILITY AND REACTIV	ITY:	
Reactivity	:	Vapor/air-mixtures are explosive at intense warming.
Chemical stability	:	Material is stable under ambient conditions
		Rick of explosion with: Acetone Potassium hydroxide

Possibility of hazardous reactions	:	Risk of explosion with: Acetone, Potassium hydroxide Exothermic reaction with: Alkaline earth metals, Bases, strong alkalis, can decompose violently in contact with: Alkali metals, Powdered metals
Conditions to avoid	:	Heating
Incompatible materials	:	No data available
Hazardous decomposition products	:	In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION:

Information on toxicological effects

Acute toxicity (list all possible	s of exposure)	
Oral Product	50 Oral - Rat - 933 mg/kg	
Dermal Product	o data available	
Inhalation Product	n - 3,1 mg/l - vapor	
Repeated dose toxicity Product	o data available.	
Skin corrosion/irritation Product	uses skin irritation.	
Serious eye damage/eye irritation Product	uses serious eye irritation.	
Respiratory or skin sensitization Product	Chemico Skin Sensitisation: Direct Peptide Reactivity As sult: negative	say (DPRA) - In vitro study
Carcinogenicity Product	o data available	
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans US. National Toxicology	o data available	
Program (NTP) Report on Carcinogens	o data available	



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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050	: No data available	
Germ cell mutagenicity	Based on available data the classification criteria are not met.	
	Test Type: Ames test	
	Test system: S. typhimurium	
	Metabolic activation: with and without metabolic activation	
	Method: OECD Test Guideline 471	
	Result: positive	
	Test Type: sister chromatid exchange assay	
	Test system: Chinese hamster ovary cells	
	Metabolic activation: Metabolic activation	
	Method: OECD	
	Test Guideline 479	
	Result: negative	
	Test Type: In vitro mammalian cell gene mutation test	
	Test system: mouse lymphoma cells	
	Metabolic activation: Metabolic activation	
	Method: OECD Test Guideline 490	
	Result: negative	
	Test Type: Chromosome aberration test in vitro	
	Test system: Chinese hamster ovary cells	
	Metabolic activation: with and without metabolic activation	
	Method: OECD Test Guideline 473	
	Result: negative	
	Test Type: unscheduled DNA synthesis assay	
	Species: Rat	
	Application Route: Oral	
	Method: OECD Test Guideline 486	
	Result: negative	
	Test Type: In vivo micronucleus test	
	Species: Mouse	
	Application Route: Oral	
	Method: OECD Test Guideline 474	
	Result: negative	
Reproductive toxicity Product	: No data available	
Specific target organ		
toxicity - single exposure Product	No data available	
Specific target organ toxicity - repeated	: No data available	



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Aspiration hazard Product	:	No data available
Other effects	:	None known.
12. ECOLOGICAL INFORMAT	ION	:
Ecotoxicity Acute hazards to the aquatic	: en	vironment
Fish Product	:	static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 29 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	:	static test EC50 - Daphnia magna (Water flea) - 46 mg/l - 48 h
Toxicity to algae	:	static test ErC50 - Pseudokirchneriella subcapitata - 13 mg/l - 72 h static test NOEC - Pseudokirchneriella subcapitata - 2,8 mg/l - 72 h
Toxicity to bacteria	:	static test EC50 - activated sludge - > 1.000 mg/l - 3 h static test NOEC - activated sludge - < 10 mg/l - 3 h
Chronic hazards to the aquat	tic e	nvironment
Fish Product	:	No data available.
Aquatic invertebrates Product	:	No data available.
Toxicity to Aquatic Plants Product:	:	No data available.
Persistence and degradabilit	y	
Biodegradation Product	:	aerobic - Exposure time 28 d Result: 6 % - Not readily biodegradable
BOD/COD ratio Product	:	No data available.
Bioaccumulative potential		
Bioconcentration factor (BCF) Product Partition coefficient n-	:	No data available on bioaccumulation.
octanol / water (log Kow) Product	:	No data available.
Mobility in soil	:	No data available.
Other adverse effects	:	No data available.
13. DISPOSAL CONSIDERATI	ON:	
Disposal instructions	:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal

Disposal instructions	:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal
		recommendations are based on uncontaminated material.
Contaminated packaging	:	Since emptied containers retain product residue, follow label warnings even after container is emptied.



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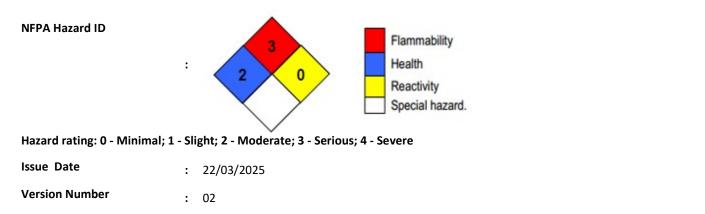
CAS Number: 75-25-2

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR/RID	UN 2515	Bromoform	6.1	III	Yes
IMDG	UN 2515	Bromoform	6.1	Ш	Yes
ΙΑΤΑ	UN 2515	Bromoform	6.1	Ш	No

15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture No Data Available.

16. OTHER INFORMATION:



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