

Bromoform CAS No 75-25-2			MATERIAL SAFETY DATA SHEET SDS/MSDS	
1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKIN				
1.1	Product identifiers			
	Product name	: Bromoform		
	CAS-No.	: 75-25-2		
1.2	Relevant identified uses	ntified uses of the substance or mixture and uses advised against		
	Identified uses	: Laboratory chemica	als, Industrial & for professional use only.	
1.3	Details of the supplier of Company	: Pallav Chemicals & 253, Shiv Shakti In	: Pallav Chemicals & Solvents Pvt. Ltd 253, Shiv Shakti Industrial Estate, Opp Mittal Estate Andheri Kurla Road, Andheri (E), Mumbai - 400050	
	Telephone Email	: +91 22 4928 4000 : <u>sales@pallavchem</u>		
1.4	Emergency telephone nun Emergency Phone #		0 (9:00am - 6:00 pm) [Office hours]	
2.	HAZARDS IDENTIFICATI	ON		
2.1	Classification of the substance or mixture			
	Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Acute toxicity, Inhalation (Category 3) Eye irritation (Category 2) Skin irritation (Category 2) Chronic aquatic toxicity (Category 2) Acute toxicity, Oral (Category 4)			
	<b>Classification according to EU Directives 67/548/EEC or 1999/45/EC</b> Toxic by inhalation. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed.			
2.2	Label elements			
	Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram			
	Signal word	Danger		
	Hazard statement(s) H302 H315 H319 H331 H331 H411	Harmful if swallo Causes skin irrita Causes serious o Toxic if inhaled. Toxic to aquatic l	ation.	

	Precautionary statement(s)				
	P261	Avoid breathing vapours.			
	P273	Avoid release to the environment.			
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
	P311	Call a POISON CENTER or doctor/ physician.			
	Supplemental Hazard	none			
	Statements				
	According to European Directive 67/548/EEC as amended.				
	Hazard symbol(s)	Acure boxicity squark environment			
	R-phrase(s)				
	R22	Harmful if swallowed.			
	R23	Toxic by inhalation.			
	R36/38	Irritating to eyes and skin.			
	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.			
	S-phrase(s)				
	S28	After contact with skin, wash immediately with plenty of soap and water.			
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).			
	S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.			
	S61	Avoid release to the environment. Refer to special instructions/ Safety			
		data sheets.			
2.3	Other hazards				

Lachrymator.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms	: Tribromomethane CHBr	
Formula	3 CHBr3	
Molecular Weight	: 252,73 g/mol	
Component		Concentration
Bromoform		
CAS-No.	75-25-2	-
EC-No.	200-854-6	
Index-No.	602-007-00-X	

# 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**4.3 Indication of any immediate medical attention and special treatment needed** no data available

# 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides, Hydrogen bromide gas
- **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

# 5.4 Further information

no data available

#### 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures** Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

# 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

- 6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable,
- **6.4 Reference to other sections** For disposal see section 13.

closed containers for disposal.

#### 7. HANDLING AND STORAGE

- **7.1 Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
- 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific end use(s) no data available

#### 8. EXPOSURE CONTROLS/PERSONAL

**PROTECTION 8.1 Control parameters** 

#### Components with workplace control

#### parameters 8.2 Exposure controls

#### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid			
b) Odour	no data available			
c) Odour Threshold	no data available			
d) pH	no data available			
<ul> <li>e) Melting point/freezing point</li> </ul>	Melting point/range: 5 - 8 °C - lit.			
<ul> <li>f) Initial boiling point and boiling range</li> </ul>	146 - 150 °C - lit.			
g) Flash point	no data available			
h) Evaporation rate	no data available			
i) Flammability (solid, gas)	no data available			
<ul> <li>j) Upper/lower</li> <li>flammability or</li> <li>explosive limits</li> </ul>	no data available			
k) Vapour pressure	6,7 hPa at 20,0 °C			
I) Vapour density	no data available			
m) Relative density	2,89 g/cm3 at 25 °C			
n) Water solubility	no data available			
<ul> <li>o) Partition coefficient: n- octanol/water</li> </ul>	no data available			
p) Auto-ignition temperature	no data available			
q) Decomposition temperature	no data available			
r) Viscosity	no data available			
s) Explosive properties	no data available			
t) Oxidizing properties	no data available			
Other safety information				
no data available				

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

9.2

no data available

- **10.2 Chemical stability** no data available
- **10.3 Possibility of hazardous reactions** no data available
- **10.4 Conditions to avoid** no data available
- **10.5** Incompatible materials Alkali metals
- **10.6 Hazardous decomposition products** Other decomposition products - no data available

#### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Acute toxicity LD50 Oral - rat - 933,0 mg/kg Remarks: Lungs, Thorax, or Respiration:Dyspnea.

LC50 Inhalation - Mammal - 12.100 mg/m3

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

**Respiratory or skin sensitization** no data available

Germ cell mutagenicity no data available

#### Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Bromoform)

#### **Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure** no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard

no data available

# Potential health effects

Inhalation	Toxic if inhaled. Causes respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes serious eye irritation.

#### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

RTECS: PB5600000

# 12. ECOLOGICAL

# **INFORMATION 12.1 Toxicity**

	Toxicity to fish LC50 - other fish - 7 mg/l - 96,0 h				
	NOEC - Cyprinodon variegatus (sheepshead minnow) - 2,9 mg/l - 9				
		LC50 - Cyprinodon variegatus (sheepshe	, •		
	Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 46	mg/l - 48 h		
12.2	Persistence and degrada	bility			
	Biodegradability	aerobic - Exposure time 28 d Result: 0 % - Not biodegradable.			
12.3	Bioaccumulative potential no data available				
12.4	Mobility in soil no data available				
12.5	Results of PBT and vPvB assessment no data available				
12.6	<b>Other adverse effects</b> Toxic to aquatic life with long lasting effects.				
13.	DISPOSAL CONSIDERAT	IONS			
13.1 V	Vaste treatment methods				
	Product				
	Offer surplus and non-recyclable solutions to a licensed disposal company.				
	Contaminated packaging Dispose of as unused product.				
14.	TRANSPORT INFORMA	TION			
14.1	UN number				
	ADR/RID: 2515	IMDG: 2515	IATA: 2515		
14.2	UN proper shipping nanADR/RID:BROMOFORIMDG:BROMOFORIATA:Bromoform	M			
14.3	Transport hazard class( ADR/RID: 6.1	es) IMDG: 6.1	IATA: 6.1		
14.4	Packaging group ADR/RID: III	IMDG: III	IATA: III		
14.5	Environmental hazards ADR/RID: yes	IMDG Marine Pollutant: yes	IATA: no		
14.6	Special precautions for no data available	user			
15		ΔΤΙΟΝ			

# 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or **mixture** no data available

# 15.2 Chemical Safety Assessment

no data available

# 16. OTHER INFORMATION

### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.pallavchemicals.com for additional terms and conditions of sale.