

# 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : B 11229

Product Name : Bromoform

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

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# 2. COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms : tri bromo methane

CAS-No : 75-25-2

Ec-Index No. : 602-007-00-X

EC-No. : 200-854-6

Molecular Formula: CHBr 3

### 3. HAZARDS IDENTIFICATION

Toxic by inhalation. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

# 4. FIRST AID MEASURES

After inhalation: fresh air. If necessary apply mouth to mouth resuscitation or mechanical ventilation.



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After skin contact: wash off with plenty of water .Remove contaminated clothing

After eye contact: rinse out with plenty of water if pain persists consult an eye specialist

After swallowing: Keep airways free. Risk of aspiration! Sodium sulphate (1 tablespoon /1/4l water ). activated charcoal. No milk. No alcohols. Summon doctor.

### 5. FIRE – FIGHTING MEASURES

Suitable extinguishing media: In adaption to materials stored in immediate neighbourhood.

Special risks: Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: HBr, bromine.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self contained breathing apparatus.

Other information: Prevent fire fighting water from entering surface water or ground water. Non combustible. Contain escaping vapours with water.

### 6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning / absorption:

Take up with liquid absorbent material. Forward for disposal. Clean up affected area.

Person – related precautionary measures:

Do not inhale vapours/ aerosols. Avoid substance contact.

Environmental protection measures: Do not allow to enter sewage system.



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# 7. HANDLING AND STORAGE

Handling: Work underhood. Do not inhale substance. Avoid generation of vapours/aerosols. Protected from light.

Storage : Tightly closed Dry .In a well ventilated place .Keep away from sources of ignition and heat& light. At +15  $^{\circ}$  C to +25  $^{\circ}$  C.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: required when vapours/aerosols are generated.

Eye protection : required

Hand protection : required

Protective clothing should be selected for the working place depending on concentration and quantity of the hazardous substance handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene: Change contaminated clothing. Application of skin protective barrier cream recommended. Wash hands after working with substance.



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# 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Colour : colourless
Odour : sweetish

PH value : not available

At  $10 \text{ g/l H}_2\text{O} (20^{\circ}\text{C})$ 

Melting temperature: 92 ° C

Boiling temperature : 149.5 °C

Ignition temperature: not flammable

Flash point : not combustible

Explosion limits lower: not available

Upper: not available

Relative vapour density : not available

Density  $(20^{\circ} \text{C})$  :  $2.89 \text{ g/cm}^{3}$ 

Solubility in water ( $30^{\circ}$ C): 3.2 g/l

water ( $20^{0}$ C): 1 g/l

ethanol (25<sup>o</sup>C) : freely soluble

# 10. STABILITY AND REACTIVITY

Conditions to be avoided: heating.

Substance to be avoided: alkali metals, alkaline earth metals, strong alkalis, metals in powder form, strong bases.

Hazardous decomposition products: in the event of fire: HBr, bromine.

Further information: Light- sensitive.



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# 11. TOXICOLOGICAL INFORMATION

Acute toxicity : LD <sub>50</sub> (oral, rat): 933 mg/Kg

LD <sub>50</sub> (oral, human): 143 mg/Kg

LD <sub>50</sub> (inhalation, rat): 31.7 mg/l/2h

The literature data available to us do not confirm with the labelling prescribed by the EC. The EC has dossiers which have not been published. Subacute to chronic toxicity: The carcinogenic potential requires further clarification. No impairment of reproductive performance suspected.

Further toxicological information

After inhalation: mucosal irritations. In high doses: narcosis. Cannot be excluded: cardiovascular disorders, damage of kidneys. Skin irritation test (rabbit): moderate irritant effect.

Eye irritation test (rabbit): moderate irritant effect.

After swallowing: tremor, agitation, unconsciousness, narcosis, dyspnoea, pain in: gastrointestinal tract.

Further data: The product should be handled with the care usual when dealing with chemicals.

### 12. ECOLOGICAL INFORMATION

Toxic for aquatic organisms . may cause long term adverse effects in aquatic environment.

Fish toxicity: L.macrochirus LC<sub>50</sub>: 29mg/l/96h;

Daphnia toxicity: Daphnia magna  $EC_{50}$ : 46mg/l/48h; Daphnia  $EC_{50}$ : 56mg/l/24h No appreciable bioaccumulation potential is to be expected ( log P(o/w)1-3 ).



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Further ecologic data: Do not allow to enter waters, waste water or soil.

### 13. DISPOSAL METHOD

Product: There are no uniform EC regulations for The disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging: Disposal in compliance with official Regulations. Handle contaminated packaging as In the same way as the substance itself. If not officially specified differently, non – contaminated packaging may be treated like household waste or recycled.

### 14. TRANSPORT INFORMATION

Transport over land

ADR/RID and GGVS/GGVE: GGVS/GGVE class: 6.1 Number and letter:15c

ADR/RID class : 6.1 Number and letter:15c

Name of material : BROMOFORM

River transport AND/ADNR: Not examined



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Sea transport IMDG: IMDG class:6.1 UN –No.:2515 Packaging group: II

Ems : 6.1-02 MFAG: 345

Correct technical name: BROMOFORM

Air transport

ICAO-TI and IATA-DGR: ICAO/IATA class: 6.1 UN/ID-No.: 2515 Packaging group: II

Correct technical name: BROMOFORM

# 15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : T Toxic

N Dangerous for the environment

R- Phrases : 23-36/38-51-53

Toxic by inhalation . Irritating to eyes and skin toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

S-phrases: 28-45-61 After contact with skin, wash immediately with plenty of

water. In case of accident or if you feel unwell, seek medical advice immediately. Avoid release to the

environment.

Water pollution class : 2 (polluting substance)

### 16. OTHER INFORMATION

Reason for alteration

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.