Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 1 of 10

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: BROMOBENZENE LR 99%

Product code: 12945

Identification of the product : Bromobenzene

CAS No :108-86-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number: +91 22 4066 8111 (10:00am - 6:00 pm)

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, H226

Category 3

Skin corrosion/irritation, H315

Category 2

Hazardous to the aquatic environment — Chronic Hazard, H411

Category 2

Classification according to Directive 67/548/EEC or 1999/45/EC

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Symbol(s): Xi : Irritation

Highly flammable





R Phrase(s): R10: Flammable.

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 2 of 10

R38: Irritating to skin.

S Phrase(s): S61: avoid release to the environment . refer to special instruction/safety data sheets.

Hazard pictograms



Signal word: Warning

Hazard statements: H226 - Flammable liquid and vapour

H315 - Causes skin irritation

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP): P273 - Avoid release to the environment

2.3. Other hazards

No additional information available

3. Composition/information on ingredients

3.1. Substance: BROMOBENZENE

CAS No: 108-86-1

Substance.

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Give oxygen or

artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Remove contact lenses, if present and easy to do.

Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries after skin contact: Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
Product Code :12945	Page 3 of 10

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Flammable liquid and vapour.

Explosion hazard: May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required.

Emergency procedures: Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

No additional information available

7. Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling: No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene measures: Wash... thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 4 of 10

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting/... equipment.

Storage conditions: Keep container tightly closed. Store in original container. Store in a dry place. Incompatible materials: Heat sources.

7.3. Specific end use(s)

No additional information available

8. Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection: protective gloves

Eye protection: Chemical goggles or safety glasses

Skin and body protection: Wear suitable protective clothing

Respiratory protection: Wear appropriate mask

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Odour threshold: No data available

pH: No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point : -31 °C

Freezing point: No data available

Boiling point: 154 - 155 **Flash point**: 51 °C

Auto-ignition temperature: 566 °C

Decomposition temperature: No data available

Flammability (solid, gas): Flammable

Flammable liquid and vapour

Vapour pressure: 5.3 hPa at 25,0 °C **Relative vapour density at 20** °C: 5.41 **Relative density**: No data available

Density: 1.5 g/cm³

Solubility: Water: Insoluble

Log Pow : 2.99

Viscosity, kinematic: No data available **Viscosity, dynamic**: No data available

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 5 of 10

Explosive properties: No data available **Oxidising properties**: No data available **Explosive limits**: 0.06 - 0.365 vol %

9.2. Other information

No additional information available

10. Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

12. Ecological information

12.1. Toxicity

Ecology - water: Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and degradability May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 6 of 10

Log Pow 2.99

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

13. Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

Recommendations: Dispose of contents/container to ...

Additional information: Handle empty containers with care because residual vapours are flammable.

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR): 2514 UN-No. (IMDG): 2514 UN-No.(IATA): 2514 UN-No.(ADN): 2514 UN-No. (RID): 2514

14.2. UN proper shipping name

Proper Shipping Name (ADR): BROMOBENZENE Proper Shipping Name (IMDG): BROMOBENZENE Proper Shipping Name (IATA): BROMOBENZENE Proper Shipping Name (ADN): BROMOBENZENE Proper Shipping Name (RID): BROMOBENZENE

Transport document description (ADR): UN 2514 BROMOBENZENE, 3, III, (D/E),

ENVIRONMENTALLY HAZARDOUS

Transport document description (IMDG): UN 2514 BROMOBENZENE, 3, III,

MARINE POLLUTANT/ENVIRONMENTALLY

HAZARDOUS (51°C c.c.)

Transport document description (IATA): UN 2514 BROMOBENZENE, 3, III,

ENVIRONMENTALLY HAZARDOUS

Transport document description (ADN): UN 2514 BROMOBENZENE, 3, III,

ENVIRONMENTALLY HAZARDOUS

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
Product Code :12945	Page 7 of 10

Transport document description (RID): UN 2514 BROMOBENZENE, 3, III,

ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR- Transport hazard class(es) (ADR) : 3

Danger labels (ADR): 3

IMDG- Transport hazard class(es) (IMDG): 3

Danger labels (IMDG): 3

IATA- Transport hazard class(es) (IATA): 3

Hazard labels (IATA): 3

ADN- Transport hazard class(es) (ADN): 3

Danger labels (ADN): 3

RID- Transport hazard class(es) (RID): 3

14.4. Packing group

Packing group (ADR): III
Packing group (IMDG): III
Packing group (IATA): III
Packing group (ADN): III
Packing group (RID): III

14.5. Environmental hazards

Dangerous for the environment: Yes

Marine pollutant : Yes

Other information: No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR): F1 Limited quantities (ADR): 5L Excepted quantities (ADR): E1

Packing instructions (ADR): P001, IBC03, LP01, R001

Mixed packing provisions (ADR): MP19

Portable tank and bulk container

instructions (ADR): T2

Portable tank and bulk container special

provisions (ADR): TP1
Tank code (ADR): LGBF
Vehicle for tank carriage: FL
Transport category (ADR): 3

Special provisions for carriage – Packages (ADR): V12 Special provisions for carriage – Operation (ADR): S2

Hazard identification number (Kemler No.): 30

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
Product Code :12945	Page 8 of 10

Orange plates: Tunnel restriction code (ADR): D/E

EAC code : 2Y **Transport by sea**

Limited quantities (IMDG): 5 L Excepted quantities (IMDG): E1

Packing instructions (IMDG): P001, LP01 IBC packing instructions (IMDG): IBC03

Tank instructions (IMDG): T2

Tank special provisions (IMDG): TP1

EmS-No. (Fire): F-E EmS-No. (Spillage): S-D Stowage category (IMDG): A Flash point (IMDG): 51°C c.c.

MFAG-No: 130 **Air transport**

PCA Excepted quantities (IATA): E1 PCA Limited quantities (IATA): Y344

PCA limited quantity max net quantity (IATA): 10L

PCA packing instructions (IATA): 355 PCA max net quantity (IATA): 60L CAO packing instructions (IATA): 366 CAO max net quantity (IATA): 220L

ERG code (IATA): 3L

Inland waterway transport

Classification code (ADN): F1 Limited quantities (ADN): 5 L Excepted quantities (ADN): E1

Equipment required (ADN): PP, EX, A

Ventilation (ADN): VE01

Number of blue cones/lights (ADN): 0

Rail transport

Classification code (RID): F1 Limited quantities (RID): 5L Excepted quantities (RID): E1

Packing instructions (RID): P001, IBC03, LP01, R001

Mixed packing provisions (RID): MP19

Portable tank and bulk container

instructions (RID): T2

Portable tank and bulk container special

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION: 02 DATE OF ISSUE: 26-08-2019 SUPERSEDES: 01
Product Code :12945	Page 9 of 10

provisions (RID): TP1

Tank codes for RID tanks (RID): LGBF

Transport category (RID): 3

Special provisions for carriage – Packages (RID): W12

Colis express (express parcels) (RID) : CE4 Hazard identification number (RID) : 30

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

BROMOBENZENE is not on the REACH Candidate List

BROMOBENZENE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Class for fire hazard: Class II-1

Store unit: 5 liter

Classification remarks: R10; Emergency management guidelines for the storage of

flammable liquids must be followed **15.2. Chemical safety assessment**

No additional information available

16. Other information

Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information: None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was

Material Safety Data Sheet	MOLYCHEM
BROMOBENZENE LR 99%	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
Product Code :12945	Page 10 of 10

obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

End of document

Prepared by: MOLYCHEM (INDIA)

For questions contact: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503

(The statements contained herein are offered for informational purposes only and are based upon technical data that MOLYCHEM believes to be accurate. It is intended for use only by persons having the necessary technical skills and at their own discretion and risk. Since conditions and manner of use are outside our control, we make NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.)