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1. Identification of the substance/mixture and of the company/undertaking **1.1. Product identifier Trade name : CHLOROBENZENE** Product code :13590 **Identification of the product** : Chlorobenzene CAS No : 108-90-7 **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 Acute toxicity (inhal.), H332 Category 4 Hazardous to the aquatic environment — Chronic H411 Hazard, Category 2 Full text of classification categories and H statements : see section 16 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) : Highly flammable N : Dangerous for the environment

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R Phrase(**s**)**:R**10: Flammable.

R20: Harmful by inhalation.

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s) :S24/25 : Avoid contact with skin and eyes.

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
H332 - Harmful if inhaled
H411 - Toxic to aquatic life with long lasting effects
Precautionary statements : P273 - Avoid release to the environment
2.3. Other hazards
No additional information available

3. Composition/information on ingredients

3.1. Substance : Chlorobenzene

CAS No : 108-90-7

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 : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

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First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

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 No additional information available

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray. 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 enter fire area without proper protective equipment, including respiratory protection.

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 : Ventilate area.

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.

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.

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Precautions for safe handling : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

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. Keep in fireproof 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 respiratory protection

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): 1.1

Melting point : -45 °C

Freezing point : No data available

Boiling point : 132 °C

Flash point : 27 °C

Auto-ignition temperature : 637 °C

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable

Flammable liquid and vapour

Vapour pressure : 15.7 hPa at 25 °C

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Relative vapour density at 20 °C : 3.9 Relative density : 1.106 at 25 °C Density : 1.11 g/cm³ Solubility : Water: Insoluble in water Log Pow : 2.89 Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available Explosive limits : 0.013 - 0.071 vol % 9.2. Other information No additional information available <u>10. Stability and reactivity</u> 10.1. Reactivity

No additional information available 10.2. Chemical stability Stable under normal conditions. 10.3. Possibility of hazardous reactions No additional information available 10.4. Conditions to avoid Open flame. 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 : Inhalation: Harmful if inhaled.
Skin corrosion/irritation : Not classified
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

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<u>12. Ecological information</u>

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

Log Pow 2.89

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): 1134 UN-No. (IMDG) : 1134 UN-No.(IATA): 1134 UN-No.(ADN) : Not regulated UN-No. (RID) : Not regulated 14.2. UN proper shipping name Proper Shipping Name (ADR) : CHLOROBENZENE Proper Shipping Name (IMDG) : CHLOROBENZENE Proper Shipping Name (IATA) : CHLOROBENZENE Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated Transport document description (ADR) : UN 1134 CHLOROBENZENE, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS Transport document description (IMDG) : UN 1134 CHLOROBENZENE, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY

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HAZARDOUS (29°C c.c.) Transport document description (IATA): UN 1134 CHLOROBENZENE, 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 **AND**: Transport hazard class(es) (ADN) : Not regulated **RID**: Transport hazard class(es) (RID) : Not regulated 14.4. Packing group Packing group (ADR) : III Packing group (IMDG) : III Packing group (IATA) : III Packing group (ADN) : Not regulated Packing group (RID) : Not regulated 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

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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) : 29°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 -Not regulated Rail transport -Not regulated 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
CHLOROBENZENE is not on the REACH Candidate List
CHLOROBENZENE is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water

(Classification according to VwVwS, Annex 2; WGK No 53)

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12th Ordinance Implementing the Federal

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

Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H332;H411>; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

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.

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End of document Prepared by: MOLVCHEM ()

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Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503

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