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

1.1. Product identifier

Trade name: 1,2-DICHLOROETHANE 98%

Product code: 14127

Identification of the product: 1,2-Dichloroethane 98% (Ethylene Dichloride) (EDC)

CAS No: 107-06-2

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, H225

Category 2

Carcinogenicity, H350

Category 1B

Acute toxicity (oral), H302

Category 4

Serious eye damage/eye irritation, H319

Category 2

Skin corrosion/irritation, H315

Category 2

Specific target organ toxicity — Single exposure, H335

Category 3,

Respiratory tract irritation

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

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

Symbol(s): T : Very toxic

Highly flammable





R Phrase(s): R11: Highly flammable.

R22: Harmful if swallowed. R45: May cause cancer.

R36/37/38: Irritating to eyes, respiratory system and skin.

S Phrase(s): S53: Avoid exposure – obtain special instruction before use.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Hazard pictograms







Signal word: Danger

Hazard statements: H225 - Highly flammable liquid and vapour

H302 - Harmful if swallowed

H315 - Causes skin irritation H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H350 - May cause cancer

Precautionary statements: P201 - Obtain special instructions before use

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 - IF exposed or concerned: Get medical advice/attention

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

3. Composition/information on ingredients

3.1. Substance: 1,2-DICHLOROETHANE For Synthesis

CAS No: 107-06-2

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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 victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see... on this label).

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

First-aid measures after ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries: May cause cancer.

Symptoms/injuries after inhalation: May cause respiratory irritation.

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Symptoms/injuries after ingestion: Swallowing a small quantity of this material will result in serious health hazard.

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

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: Highly 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.

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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. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

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 in fireproof place. Keep container tightly closed.

Incompatible materials: Heat sources.

7.3. Specific end use(s)

No additional information available

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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): No data available

Melting point: -35 °C

Freezing point : No data available

Boiling point: 82 - 84 **Flash point**: 13 °C

Auto-ignition temperature: 413 °C

Decomposition temperature: No data available

Flammability (solid, gas): Flammable Highly flammable liquid and vapour Vapour pressure: 86 hPa at 20 °C

Relative vapour density at 20 °C: No data available

Relative density: 1.25 at 20 °C

Density: 1.24 g/cm³

Solubility: Water: 8.69 g/l at 20 °C

Log Pow: 1.48

Viscosity, kinematic: No data available Viscosity, dynamic: No data available Explosive properties: No data available Oxidising properties: No data available Explosive limits: 0.062 - 0.162 vol %

9.2. Other information

No additional information available

10. Stability and reactivity

10.1. Reactivity

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Highly flammable liquid and vapour.

10.2. Chemical stability

Highly 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. Direct sunlight.

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: Oral: Harmful if swallowed. Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified Carcinogenicity: May cause cancer. Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Harmful if swallowed.

12. Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Log Pow 1.48

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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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): 1184 UN-No. (IMDG): 1184 UN-No.(IATA): 1184 UN-No.(ADN): 1184 UN-No. (RID): 1184

14.2. UN proper shipping name

Proper Shipping Name (ADR): ETHYLENE DICHLORIDE Proper Shipping Name (IMDG): ETHYLENE DICHLORIDE Proper Shipping Name (IATA): ETHYLENE DICHLORIDE Proper Shipping Name (ADN): ETHYLENE DICHLORIDE Proper Shipping Name (RID): ETHYLENE DICHLORIDE

Transport document description (ADR): UN 1184 ETHYLENE DICHLORIDE, 3 (6.1), II, (D/E)

Transport document description (IMDG): UN 1184 ETHYLENE DICHLORIDE, 3 (6.1), II (13°C c.c.)

Transport document description (IATA): UN 1184 ETHYLENE DICHLORIDE, 3 (6.1), II

Transport document description (ADN): UN 1184 ETHYLENE DICHLORIDE, 3 (6.1),

Transport document description (RID): UN 1184 ETHYLENE DICHLORIDE, 3 (6.1), II

14.3. Transport hazard class(es)

ADR- Transport hazard class(es) (ADR): 3 (6.1)

Danger labels (ADR): 3, 6.1

IMDG- Transport hazard class(es) (IMDG): 3 (6.1)

Danger labels (IMDG): 3, 6.1

IATA- Transport hazard class(es) (IATA) : 3 (6.1)

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Hazard labels (IATA): 3, 6.1

ADN- Transport hazard class(es) (ADN): 3 (6.1)

Danger labels (ADN): 3, 6.1

RID- Transport hazard class(es) (RID): 3 (6.1)

Danger labels (RID): 3, 6.1

14.4. Packing group

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

14.5. Environmental hazards

Dangerous for the environment: No

Marine pollutant : No

Other information: No supplementary information available

14.6. Special precautions for user

Overland transport- Classification code (ADR): FT1

Limited quantities (ADR): 1L Excepted quantities (ADR): E2

Packing instructions (ADR): P001, IBC02 Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T7

Portable tank and bulk container special provisions (ADR): TP1

Tank code (ADR): L4BH

Tank special provisions (ADR): TU15

Vehicle for tank carriage: FL Transport category (ADR): 2

Special provisions for carriage - Loading, unloading and handling (ADR): CV13, CV28

Special provisions for carriage – Operation (ADR): S2, S19

Hazard identification number (Kemler No.): 336

Orange plates:

Tunnel restriction code (ADR): D/E

EAC code: 2YE

Transport by sea- Limited quantities (IMDG): 1 L

Excepted quantities (IMDG): E2
Packing instructions (IMDG): P001
IBC packing instructions (IMDG): IBC02

Tank instructions (IMDG): T7

Tank special provisions (IMDG): TP1

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EmS-No. (Fire): F-E EmS-No. (Spillage): S-D

Stowage category (IMDG): B Stowage and handling (IMDG): SW2

Flash point (IMDG): 13°C c.c.

MFAG-No: 131

Air transport- PCA Excepted quantities (IATA): E2

PCA Limited quantities (IATA): Y341

PCA limited quantity max net quantity (IATA): 1L

PCA packing instructions (IATA): 352 PCA max net quantity (IATA): 1L CAO packing instructions (IATA): 364 CAO max net quantity (IATA): 60L

ERG code (IATA): 3P

Inland waterway transport- Classification code (ADN): FT1

Special provisions (ADN): 802 Limited quantities (ADN): 1 L Excepted quantities (ADN): E2 Carriage permitted (ADN): T

Equipment required (ADN): PP, EP, EX, TOX, A

Ventilation (ADN): VE01, VE02 Number of blue cones/lights (ADN): 2

Rail transport- Classification code (RID): FT1

Limited quantities (RID): 1L Excepted quantities (RID): E2

Packing instructions (RID): P001, IBC02 Mixed packing provisions (RID): MP19

Portable tank and bulk container instructions (RID): T7

Portable tank and bulk container special provisions (RID): TP1

Tank codes for RID tanks (RID): L4BH

Special provisions for RID tanks (RID): TU15

Transport category (RID): 2

Special provisions for carriage – Loading and unloading (RID): CW13, CW28

Colis express (express parcels) (RID) : CE7 Hazard identification number (RID) : 336

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

Not applicable

15. Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

1,2-dichloroethane is on the REACH Candidate List

1,2-dichloroethane (EDC) is on the REACH Annex XIV List:

Authorisation number Sunset date REACH authorization exemptions 22/11/2017

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference: Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK No 102)

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 I-1

Store unit: 1 liter

Classification remarks : F <Flam. Liq. 2>; 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

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

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

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End of document

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