

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : E 10529

Product Name : 1,2-DICHLOROETHANE

Manufacturer / supplier identification

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

Tel - 0484 2800212, 2802755

Contact for Information : Tel . No. – 0484 2802536 Fax : 0484 2802483 Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms:

Ethylene chloride; ethylene dichloride

CAS-No : 107-06-2 EC-Index-No:. 602-012-00-7 EC -No. 202-458-1

Molar mass : 98.97 Formula Hill : ----

Molecular formula: C₂H₄CI₂

3. HAZARDS IDENTIFICATION: May cause cancer. Highly flammable .Also harmful if swallowed.

Irritating to eyes, respiratory system and skin.

Restricted to professional users. Attention –Avoid exposure- obtain

special instructions before use.

4. FIRST AID MEASURES: After skin contact: wash off with plenty of water.Remove contaminated

clothing.

After eye contact: Rinse out with plenty of water with the eyelid

held wide open.

After inhalation: fresh air. If necessary, apply mouth-to-mouth

resuscitation or mechanical ventilation .Keep airways free.

After swallowing: Immediately make victim drink plenty of water.

Subsequently administer: activated charcoal (20-40 g in 10% slurry).



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Paraffin oil(3ml/kg).

Laxative: Sodium sulfate (1 tablespoon/l/4 l water). Summon doctor.

Gastric lavage. No milk. No castor oil. No alcohol.

5.FIRE - FIGHTING MEASURES

Suitable extinguishing media: water, CO₂, foam, powder.

Special risks: Combustible. Vapours heavier than air. Formation of explosible mixtures possible with air. Keep away from sources of ignition.

Take measures to prevent electrostatic charging. Development of hazardous combustion gases or vapours possible in the event of fire.

The following may develop in event of fire: chlorine, hydrochloric acid,

phosgene.

Special protective equipments for fire fighting: Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Person- related precautionary measures:

Do not inhale vapours/aerosols.

Environmental –protection measures:

Do not allow to enter sewerage system.

Procedures for cleaning/absorption: Take up with liquid –absorbent material (e.g. Chemizorb)). Forward for disposal. Clean up effected area.

7.HANDLING AND STORAGE

Handling: Measures to prevent electrostatic charging.

Protect from light.

Storage: Tightly closed in a well-ventilated place.



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Keep away from sources of ignition and heat. At $+15^{\circ}$ C to $+25^{\circ}$ C. Accessible only for authorized persons.

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 specifically For the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene: Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid

Colour : Colourless

Odour : Of solvent

PH value : Not available

Viscosity dynamic (20°C) : 0.80 mPa *s

Melting temperature : -35.5 ° C

Boiling temperature : 84.1 ° C

Ignition temperature : $440\,^{\circ}$ C Flash point : $13\,^{\circ}$ C



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> Explosion limits lower 6.2 vol%

> > Upper 16 vol%

Vapour pressure (20°C) 87 hPa

Relative vapour density Not available Density (20°C) $1.25 \, \text{g/cm}^{3}$

Bulk density Solubility in water(20°C) $8.7 \, \text{g/l}$ Ethanol (20°C) Soluble

10. STABILITY AND REACTIVITY

Conditions to be avoided Heating.

Substance to be avoided Alkali metals, alkaline earth metals, aluminium in powder form, alkali amides, nitric acid, nitrogen oxides, oxidizing agent.

Hazardous decomposition products: In the event of fire: clorine,

hydrochloric acid, phosogens.

Further information Light-sensitive;

Solvent for : fats, resines.

Unsuitable working materials: various plastics, light metals.

Explosible with air in a vapours/gaseous state.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD 50 (oral, rat): 670 mg/kg.

LC50 (inhalation, rat): 1000 ppm (V) /7h;

Subacute to chronic toxicity: Animal experiments performed under conditions comparable with the workplace situation have

shown the substance to be carcinogenic.

Further toxicological information: Severe irritations of: eyes, skin, mucous membrane.



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After skin contact: Danger of skin absorption.

After swallowing: Irritations of mucous membranes in the mouth,

pharynx, oesophagus and gastrointestinal tract.

After absorption : CNS disorders (shock, narcosic).

Absorption may result in damage of the following: liver, kidneys. Further data: The product should be handled with the care usual

when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Biologic degradation : Slightly biodegradable.

Behavior in environmental compartments:

Low bioaccumulation potential.

Evaluation number (FRG) (bacteria): 3.2; Evaluation number

(FRG)(fish):3.5;

Evaluation number (FRG) (mammal) :3;

Ecotoxic effects:

Biological effects: Toxic for aquatic organisms.

Aquatic organisms LC_{50} : 100 mg/l/96 h;

Fish toxicity: fish LC 50: 150 mg/l

Bacterial toxicity: Ps putida EC₀: 135 mg/l:

Algeal toxicity : M. aeruginosa EC $_{0}$: 105 mg/l ;

Crustaceans : Daphnia magna LC 50 : 218 mg/l;

Further ecologic data:

COD: 1.025 g/g;

THOD: 0.97 g/g;

Do not allow to enter waters, waste water, or soil!



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13. DISPOSAL METHOD

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 that you corresponding laws and regulations. We recommend contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal in compliance with official regulations. Handle contaminated packaging 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: 3 Number and letter: 16 b

ADR/RID class: 3 Number and letter: 16 b

Name of materia l : 1184 ETHYLENDICHLORID

River transport AND/ADNR : not examined

Sea transport IMDG

IMDG class : 3.2 UN-No.: 1184 Packaging group: 11

EMS : 3-03 MFAG : 340

Correct technical name : ETHYLENE DICHLORIDE

Air transport ICAO-TI and IATA-DGR

ICAO/IATA class: 3/6.1 UN/ID-No.: 1184 Packaging group: 11

Correct technical name : ETHYLENE DICHLORIDE



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5. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol: F Highly flammable.

Toxic

R-phrases : 45-11-22-36/37/38 May cause cancer. Highly flammable. Also

harmful if swallowed. Irritating to eyes,

respiratory system and skin.

S-phrases : 53-45 Avoid exposure- obtain special instructions

before use. In case of accident or if you feel

unwell, seek medical advice immediately

(show the label where possible).

EC-No.: 203-458-1 EC label

T

Water pollution class : 3 (highly polluting substance)

16. OTHER INFORMATION

Reason for alteration.

Change in product name.

General update.

Regional representation:

The information is given on the authorised Safety Data Sheet for your country.

The information contained here in is based on the present state of our knowledge.

It characterizes the product with regard to the appropriate safety precautions.

It does not represent a guarantee of the properties of the product.
