



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : D 10529

Product Name : Diethanolamine

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 Telefax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No : 111-42-2

EC-No. :203-868-0

Molecular Formula: C₄H₁₁NO₂

Molar mass: 135.17

3. HAZARDS IDENTIFICATION : irritating to eyes and skin.

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 eyelids held open. Summon eye specialist.

After swallowing: Make victim drink plenty of water, induce vomiting. Summon doctor.

After inhalation: Fresh air

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media: powder , water, foam, CO₂



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Special risks: Development of hazardous combustion gases or vapours possible in the event of fire. Combustible. formation of explosible mixtures possible with air. Keep away from sources of ignition.. take measures to prevent electrostatic charging.

The following may develop in the event of fire: nitrous gases Special protective equipment for fire fighting: Do not stay in dangerous zone without self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Person related measures: Do not inhale vapours /aerosols. avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Procedures for cleaning/ absorption: Take up with liquid absorbent material (Eg chemizorb).

Forward for disposal. Clean up affected area

7. HANDLING AND STORAGE

Handling: No further requirements

Storage: Tightly closed . dry I a well ventilated place

at+15⁰ C to +25⁰ C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: required. When vapours/aerosols are generated

Eye protection: required

Hand protection: required



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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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid/liquid
Colour : colourless
Odour : weakly amine like
Melting temperature: 28 °C
Boiling temperature : 269-271 °C
PHvalue at 10g/l H₂O : ~11
Ignition temperature: 370 °C
Flash point : 177 °C
Explosion limits lower : 1.7 vol%
Upper : 6.4 vol%
Relative vapour density : Not available
Density (20°C) : 1.09 g/m³
Solubility in
water (20°C): soluble



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10. STABILITY AND REACTIVITY

Conditions to be avoided: heating

Substance to be avoided: strong oxidising agents, nitriles, nitrous acids, acids, anhydrides.

Hazardous decomposition products: in the event of fire Nitrous gases

Further information: inflammable; hygroscopic;

Unsuitable working materials: copper and copper alloys;

Explosible with air in a vaporous / gaseous state.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD₅₀(oral, rat): 676 mg/kg

LD₅₀(dermal, rabbit): 8328 mg/kg

Further toxicological information

After inhalation: Irritations of the mucous membranes, coughing and dyspnoea.

After skin contact: irritations .

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

After eye contact: irritations.

Further data: further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals

12. ECOLOGICAL INFORMATION

Behaviour in environmental compartments:

Distribution: log P (oct): -1.43



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No appreciable bioaccumulation potential is to be expected ($\log P(o/w) < 1$)

Evaluation number (FRG) (bacteria): 4.8;

Evaluation number (FRG) (mammal): 3.7;

Evaluation number (FRG) (fish): 3;

Ecotoxic effects:

Biological effects: Harmful effect on aquatic organisms.

Harmful effect due to pH shift. Damage of fish and plankton. When introduced properly, no impairments in the function of adapted biological waste- water- treatment plants are to be expected.

Fish toxicity: *Lidus* LC₅₀: 1850 mg/l/48h; *P.promelas* LC₅₀: 1664 mg/l/96h;

Daphnia toxicity: *Daphnia magna* LC₅₀: 110 mg/l/96h;

Aquatic organisms LC₅₀: >1000 mg/l/96h;

Maximum permissible toxic concentrations: Bacterial toxicity: *Ps.putida* EC₅: 16 mg/l ;

Further ecologic data:

BOD₅: 01.03g/g, COD: 1.52 g/g; ThOD: 2.13 g/g;

Do not allow to enter waters, waste waters 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 .



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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 : Not subject to transport regulations

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : Xi Irritant

R- Phrases : 36/38 Irritating to eyes and skin.

S-phrases : 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Water pollution class : 1 (slightly 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.
