S a f e t y D a t a S h e e t

According to Regulation (EC) 1907/2006

15A765 **Diethylenetriamine, 98%** PS

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

Diethylenetriamine

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA, S.L.U.
C/Garraf, 2
Polígono Pla de la Bruguera
E-08211 Castellar del Vallès
(Barcelona) Spain
Tel. (+34) 937 489 400
e-mail: product.safety@panreac.com

Emergencies:

Single telephone number for emergency calls: 112 (EU)

Tel.:(+34) Tel.:(+34) 937 489 499

2. Identification of dangers

Harmful in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact.

3. Component Composition/Information

Name: Diethylenetriamine
Formula: $C_4H_{13}N_3$ M.=103,17 CAS [111-40-0]
EC number (EINECS): 203-865-4
EC index number: 612-058-00-X

4. First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

4.5 Swallowing:

Drink lemon juice, vinegar or milk mixed with raw eggs. Subsequently, drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance.

5. Fire-fighting means

5.1 Suitable fire-extinguishing means:

Water. Carbon dioxide (CO_2). Foam. Dry powder.

5.2 Fire-fighting means which must NOT be used:

5.3 Special risks:

Combustible. Keep away from sources of ignition. In the event of fire, fumes may form: NOx.

5.4 Protective equipment:

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6. Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Do not inhale the fumes.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

7. Handling and storage

7.1 Handling:

Handle under an extractor fan.

7.2 Storage:

Well sealed containers. In a cool place. In well ventilated premises.

8. Staff exposure/protection controls

8.1 Technical protective measures:

8.2 Exposure limit control:

VLA-ED: 1 ppm or 4,3 mg/m3

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands before breaks and when the job is done. Do not inhale the substance.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

The supplier of the protection equipment must specify the type of protection to be worn when handling the substance or preparation, including the type of material and the breakthrough time of the material, with regard to the amount and duration of exposure.

9. Physical and chemical properties

Appearance:

Yellowish liquid.

Odour:

Characteristic.

pH > 12 (10%)
Boiling point:206-209°C
Melting point: -35°C
Flash point: 90°C
Self-ignition temperature: 325°C
Explosion limits (lower/upper): 4,4 / 16,1 Vol. %
Vapour pressure: (20°C) 0,5 hPa
Density (20/4): 0,95
Solubility: Soluble in water.

10. Stability and reactivity

10.1 Conditions which should be avoided:

10.2 Matter which should be avoided:

Strong oxidant agents. Nitrites. Nitrous acid.

10.3 Hazardous decomposition products:

10.4 Complementary information:

Hygroscopic.

11. Toxicological information

11.1 Acute toxicity:

LD_{50} oral rat: 1080 mg/kg
LD_{50} intraperitoneal rat: 74 mg/kg
LD_{50} intraperitoneal mouse: 71 mg/kg
LD_{50} dermal rabbit: 1090 mg/kg

11.2 Dangerous effects for health:

Upon contact with the skin: burns.
Through contact with the eyes: burns. Risk of blindness (irreversible injury of the optic nerve).
If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract.
Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

12. Environmental information

12.1 Mobility:

12.2 Ecotoxicity:

12.1.1 - EC_{50} test (mg/l):

Bacteria (Photobacterium phosphoreum) = 27 mg/l ; Classification: Extr. toxic

12.2.2 - Receptor medium:

Risk for the water environment = High

Risk for the land environment = Medium

12.2.3 - Observations:

The ecotoxicity is due to the pH deviation.

12.3 Degradability:

12.3.1 - Test:-------

12.3.2 - Biotic degradation classification:

BOD_5/COD Biodegradability = -----

12.3.3 - Abiotic degradation depending on pH: -------

12.3.4 - Observations:

Biodegradable product.

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk = -----

12.4.3 - Observations:

Non-bioaccumulable product.

12.5 Other possible effects on the environment:

Environmental risks cannot be excluded if used and/or disposed of inappropriately.

13. Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country. In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.
2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.
Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

14. Information concerning transport

Overland (ADR):
Technical name: DIETILENTRIAMINA
ONU 2079 Class: 8 Packaging group: II (E)
By sea (IMDG):
Technical name: DIETILENTRIAMINA
ONU 2079 Class: 8 Packaging group: II
By air (ICAI-IATA):
Technical name: Dietilentriamina
ONU 2079 Class: 8 Packaging group: II
Packaging instructions: CAO 812 PAX 808

15. Mandatory information

15.1 Labelling as per REACH

Symbols: 

Danger indications: Corrosive

Phrases R: 21/22-34-43 Harmful in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact.

Phrases S: 26-36/37/39-45 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye-face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

EC index number: 612-058-00-X

16. Other information

Review number and date:1 07.06.09

In respect of the previous review, changes have been made to the following sections: 8.

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.