



1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Diethanolamine
- **Manufacturer/Supplier:**
Petrochem Middle East FZE
PO Box 17028,
Jebel Ali Free Zone
Dubai, UAE
Ph +971 4 8839222; Fax +971 4 8834133
- **Further information obtainable from:** Product safety department.

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
111-42-2 2,2'-iminodiethanol
- **Identification number(s)**
- **EINECS Number:** 203-868-0
- **EU Number:** 603-071-00-1

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**
R 22 Harmful if swallowed.
R 38 Irritating to skin.
R 41 Risk of serious damage to eyes.
R 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

4 First aid measures

- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Protective equipment:** No special measures required.



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6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special requirement
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

diethanolamine

REL (USA)	15 mg/m ³ , 3 ppm
TLV (USA)	2 mg/m ³ , 0.46 ppm
	Skin

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form:	Fluid
Colour:	Colourless
Odour:	Ammonia-like

· Change in condition

Melting point/Melting range:	<10°C
Boiling point/Boiling range:	ab 100 °C

· Flash point: 176°C

· Ignition temperature: 370°C

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	2.1 Vol %
Upper:	10.6 Vol %

· Vapour pressure at 10°C: 2 hPa

· Density at 20°C: 1.0899/30°C g/cm³

· Solubility in / Miscibility with water at 20°C: 954 g/l

· pH-value (53 g/l) at 20°C: 11

· Viscosity:

Dynamic at 30°C: 352 mPas

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral	LD50	1600 mg/kg (rat)
Dermal	LD50	12200 mg/kg (rabbit)

· Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.

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- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -

15 Regulatory information

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**

Xn Harmful

- **Risk phrases:**

22 Harmful if swallowed.

38 Irritating to skin.

41 Risk of serious damage to eyes.

48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

- **Safety phrases:**

2 Keep out of the reach of children.

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

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department.
- **Contact:** Terminal Manager

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