



Univar USA Inc Safety Data Sheet

SDS No:

Version No:

Order No:

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300



Safety Data Sheet

Preparation Date 05-18-2010

Revision date 01-20-2016

Revision number 3

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product name Diethylaminoethanol

Other means of identification

Product code 51155

Synonyms 2-Diethylaminoethanol N,N-diethylethanolamine, 2-Diethylaminoethyl alcohol

Recommended use of the chemical and restrictions on use

Recommended use Chemical intermediate.

Uses advised against No information available

Details of the Supplier of the Safety Data Sheet

Supplier Address
Taminco US LLC
A subsidiary of Eastman Chemical
Company
Two Windsor Plaza, Suite 411
7540 Windsor Drive
Allentown, PA USA 18195
T: +(800) 223-3258

Manufacturer Address
Taminco US LLC
3790 Highway 30
St Gabriel, La USA 70776
(800) 223-3258

Emergency telephone number

Emergency Telephone

In case of emergency call CHEMTREC 1-800-424-9300
for International calls 1-703-527-3887

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Flammable Liquids	Category 3

Label Elements

Symbols/Pictograms



Signal Word
DANGER

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hazard statements

Toxic if inhaled
Toxic in contact with skin
Harmful if swallowed
Causes severe skin burns and eye damage
Flammable liquid and vapor

Precautionary Statement - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces - no smoke
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof equipment

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
Call a POISON CENTER or doctor/physician if you feel unwell
IF INHALED: 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
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local regulation

Hazards Not Otherwise Classified (HNOC)

Not Applicable

3. Composition/information on Ingredients

Synonyms

2-Diethylaminoethanol, N,N-diethylethanolamine, 2-Diethylaminoethyl alcohol.

Chemical name	CAS-No	Weight %	Trade secret
2-Diethylaminoethanol	100-37-8	>99.0	No

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

First Aid Measures

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General advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Immediate medical attention is required.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician or Poison Control Centre immediately.
Ingestion	Never give anything by mouth to an unconscious person. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Call a physician or Poison Control Centre immediately.
Protection of First-aiders	Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Causes skin and eye burns. Inhalation of vapors is irritating to the respiratory system, may cause throat pain and cough.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically.

5. Fire-fighting measures

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Combustible material. Vapors may form explosive mixture with air. Vapors are heavier than air and may spread along floors. Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Nitrogen oxides (NOx). Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Wear suitable protective clothing, gloves and eye/face protection. Wear respiratory protection.

Environmental Precautions

Dispose of contents/container in accordance with local regulation. Prevent product from entering drains. Contain all contaminated water for removal and treatment.

Methods and material for containment and cleaning up

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Use explosion-proof equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Large spills should be collected mechanically (remove by pumping) for disposal. Take up mechanically and collect in suitable container for disposal. After cleaning, flush away traces with water.

7. Handling and Storage

Precautions for Safe Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

incompatible materials Incompatible with strong acids and bases. Incompatible with oxidizing agents.

8. Exposure Controls/Personal Protection

Control Parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Diethylaminoethanol 100-37-8	TWA: 2 ppm Skin	PEL: 50 mg/m ³ , 10 ppm Can be absorbed through the skin.	100 ppm

IDLH: Immediately Dangerous to Life or Health

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Wear a positive-pressure supplied-air respirator with full facepiece. Face-shield.
- Skin and Body Protection** Wear protective gloves and protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection** If irritation is experienced, NIOSH approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
- General hygiene considerations** Regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state liquid
appearance clear liquid
color colorless
Odor Amine-like

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	11.5 (10% solution)	@ 20 °C / 68 °F
Melting point/freezing point	-68 °C / -90 °F	
Boiling Point/Range	162.36 °C / 324 °F	
flash point	51.7 °C / 125 °F	Closed cup

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evaporation rate	No information available	
flammability (solid, gas)		
Flammability limit in air		
Upper flammability limit:	10.10% Vol	
Lower flammability limit:	0.7% Vol	
vapor pressure	2 hPa @22.4°C/72.32°F	
vapor density	4 (Air =1.0)	
Specific gravity	0.88	@ 20 °C / 68 °F
Water solubility	Soluble	
Solubility in Other Solvents	No information available	
Partition coefficient	Log Pow : 0.21	@23°C/73.4°F
Autoignition temperature	320 °C / 608 °F	
decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	4.002 mPas	@25°C/77°F
Explosive properties	Not explosive	
Oxidizing properties	None	

OTHER INFORMATION

molecular weight	117.2
VOC Content	100%
density	0.88 g/cm3 @ 20 °C / 68 °F

10. Stability and Reactivity

Reactivity

Stable under normal conditions

Chemical stability

Flammable liquid and vapor. Avoid contact with heat and ignition sources.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Burning produces obnoxious and toxic fumes. Heating can release hazardous gases. To avoid thermal decomposition, do not overheat.

incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Nitrogen oxides (NOx). Carbon oxides.

11. Toxicological Information

Inhalation	Corrosive by inhalation.
Eye contact	Risk of serious damage to eyes.
Skin contact	Corrosive to skin. May be absorbed through the skin in harmful amounts.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Causes burns to skin and eyes Inhalation of vapors is irritating to the respiratory system, may cause throat pain and cough

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LD50/oral/rat = 1320 mg/kg
 LD50/dermal/guinea-pigs = 855 mg/kg
 LC50/inhalation/4h/rat = 4.6 mg/l
Eye irritation Corrosive, Risk of serious damage to eyes
Skin irritation Corrosive, Causes burns
sensitization No sensitization responses were observed
Mutagenic effects Did not show mutagenic effects in animal experiments
Carcinogenic effects Did not show carcinogenic or teratogenic effects in animal experiments
Specific target organ systemic toxicity (single exposure) No information available
Specific target organ systemic toxicity (repeated exposure) No observed adverse effect level : 50 - 400 mg/kg/d, oral, two-year

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
2-Diethylaminoethanol 100-37-8 (>99.0)	Not Listed	Not Listed	Not Listed	Not Listed

Chronic toxicity Avoid repeated exposure. Possible risks of irreversible effects.
Target organ effects Respiratory System, skin, eye.

12. Ecological Information

Ecotoxicity

Product information

Toxicity to Fish LC50 : >100 mg/l
EC50/48h/daphnia = 83.6 mg/l
EC50/72h/algae = 30 mg/l
EC50 / Tox Bacteria : No information available

Persistence/Degradability
 READILY BIODEGRADABLE.

Bioaccumulative potential

Mobility in Soil

Koc = 72

Chemical name	Log Pow
2-Diethylaminoethanol 100-37-8	0.21 @23 C

Other Adverse Effects No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Dispose of in accordance with local regulations.
Contaminated packaging Empty containers should be taken for local recycling, recovery or waste disposal.

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14. Transport Information

DOT

Shipping Description	UN2686, 2-Diethylaminoethanol, 8(3), PG II
UN-No	UN2686
Hazard class	8
Subsidiary class	3
Packing group	II

IATA

UN-No	UN2686
Hazard class	8
Subsidiary class	3
Packing group	II
Marine pollutant	No

IMDG/IMO

UN-No	UN2686
Proper shipping name	2-Diethylaminoethanol
Hazard class	8
Subsidiary class	3
Packing group	II
Marine pollutant	No

15. Regulatory Information

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA TITLE III SECTION 313 INFORMATION:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous

Categorization

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

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CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations

California Proposition 65

No Data Available

State Right-to-Know

Chemical name	NJ	Ma	Pa
2-Diethylaminoethanol 100-37-8	X	X	X

U.S. EPA Label information

EPA Pesticide registration number Not Applicable

WHMIS Hazard Class

E Corrosive material
B3 Combustible liquid

CANADA

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other Information

NFPA
HMIS

HEALTH 3
HEALTH 3

FIRE 2
flammability 2

Instability 0
Physical hazards 0

Physical hazard -

Preparation Date 05-18-2010

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Revision Summary

GHS - Classification

Disclaimer:

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End of Safety Data Sheet

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

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