

Safety Data Sheet

Product No. 18315 Dimethylaminoethanol (DMAE)

Issue Date (04-09-15)

Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: Dimethylaminoethanol (DMAE)

Synonym: 2- Dimethylaminoethanol

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day

CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

2.1 Classification of the substance or mixture

GHS Pictograms



GHS02



GHS05



GHS07

GHS Categories

GHS02	Flammable Flamm. Liq. 3	H226: Flammable liquid and vapor
GHS05	Corrosive Skin Corr. 1B	H314: Causes severe skin burns and eye damage
GHS07	Irritant Acute Tox. 4 Acute Tox. 4 Acute Tox. 4	H302: Harmful if swallowed H312: Harmful in contact with skin H332: Harmful if inhaled

Signal Word: DANGER

2.2 Label elements

Labeling according to EU guidelines

This product has been classified and marked in accordance with GHS guidelines.

Hazard-determining components of labeling

2-dimethylaminoethanol

Hazard statements

H226	Flammable liquid and vapor.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P322	Specific measures (see on this label).
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/ national/international regulations.

2.3 Other Hazards

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Corrosive: Causes burns.

Harmful: Harmful by inhalation, in contact with skin and if swallowed.

Flammable

Information concerning particular hazards for human and environment: Not applicable.

Label elements:

Labeling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product:

Label: Corrosive

Risk phrases

Flammable.

Harmful by inhalation, in contact with skin and if swallowed.

Causes burns.

Safety phrases

Keep locked up and out of the reach of children.

Avoid contact with eyes.

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.

Health Effects

NFPA Hazard Rating: Health: 3; Fire: 3; Reactivity: 0

HMIS® Hazard Rating: Health: 4; Fire: 3; Reactivity: 0

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Emergency overview

Appearance: Colorless liquid

Immediate effects: ND

Potential health effects

Primary Routes of entry: Inhalation, ingestion, eye and skin contact.

Signs and Symptoms of Overexposure: ND

Eyes: Strong caustic effect

Skin: Harmful by contact with skin.

Ingestion: Harmful if swallowed.

Inhalation: Harmful by inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen:

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	NTP	IARC	OSHA regulated
2-dimethylaminoethanol (108-01-0) EC number: 203-542-8 Index number: 603-047-00-0	≤100	NE	NE	No	No	No

Section 4: First Aid Measures

If accidental overexposure is suspected

General information: Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Eye(s) Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

Ingestion: Immediately call a doctor. Drink copious amounts of water and provide fresh air.

Note to physician

Information for doctor: Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: 31 °C (88 °F)

Flammable Limits: ND

Ignition temperature: 220 °C (428 °F)

Auto-ignition point: ND

Fire Extinguishing Media: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Fire Fighting Procedures: No further relevant information available.

Advice for firefighters: Protective equipment: Mouth respiratory protective device.

Unusual Fire and Explosion Hazards: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

Hazardous combustion products: Oxides of Carbon and Nitrogen.

DOT Class: Corrosive, Flammable.

Section 6: Accidental Release Measures

Steps to be taken in case material is released or spilled

Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Ensure adequate ventilation.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage: Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep receptacle tightly sealed. Protect from direct heat and sunlight.

Storage temperature: No special requirements.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Use in chemical fume hood.

Personal Protection 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 eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protective gloves: Wear protective gloves. The glove material has to be impermeable and resistant to the product/substance/preparation.

Skin protection: Wear gloves and protective clothing.

Eye protection: Tightly sealed goggles.

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Colorless liquid.

Odor (threshold): Ammonia-like (ND)

Specific Gravity (H₂O=1): 0.89 g/cm³ (7.427 lbs/gal)

Vapor Pressure (mm Hg): 5.6 hPa (4 mm Hg)

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND

Boiling Point: 133 °C (271 °F)

Melting point: <-70 °C (<-94 °F)

pH: ND

Solubility in Water: Fully miscible.

Molecular Weight: ND

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Avoid flame and sparks

Materials to Avoid (Incompatibility): No further relevant information available.

Hazardous Decomposition Products: No dangerous decomposition products known

Hazardous Polymerization: No dangerous reactions known.

Section 11: Toxicological Information

Results of component toxicity test performed:

Acute toxicity: LD/LC50 values that are relevant for classification: 108-01-0, 2-dimethylaminoethanol

Oral LD50	2000 mg/kg (rat)
Dermal LD50	1370 mg/kg (rabbit)
Inhalative LC50/4 h	3.25 mg/l (mouse)

Primary irritant effect:

On the skin: Caustic effect on skin and mucous membranes.

On the eye: Strong caustic effect.

Sensitization: No sensitizing effects known.

Additional toxicological information: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic categories:

IARC (International Agency for Research on Cancer): Substance is not listed.

NTP (National Toxicology Program): Substance is not listed.

Human experience: ND

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: Water hazard class 1 (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. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND

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

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Proper shipping name: 2-Dimethylaminoethanol

Hazard Class: 8 (3)

Packaging group: II

UN Number: UN2051

IATA: Proper shipping name: 2-Dimethylaminoethanol

Hazard Class: 8 (3)

Packing group: II

UN Number: UN2051

Marine Pollutant: No

Canadian TDG: 2-Dimethylaminoethanol

Section 15: Regulatory Information

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Section 355 (extremely hazardous substances): Substance is not listed.

SARA Title III: Section 313 (Specific toxic chemical listings): Substance is not listed.

RCRA: ND

TSCA: Substance is listed.

CERCLA: No

State Regulations

California Proposition 65:

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed.

Chemicals known to cause reproductive toxicity for males: Substance is not listed.

Chemicals known to cause developmental toxicity: Substance is not listed.

Carcinogenic categories

EPA (Environmental Protection Agency): Substance is not listed.

TLV (Threshold Limit Value established by ACGIH): Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed.

International Regulations

Canada WHMIS: ND

Europe EINECS Numbers: See Section 3.

Section 16: Other Information

Label Information: Corrosive, Flammable.

European Risk and Safety Phrases: See Section 2.

European symbols needed: Corrosive, Harmful.

Canadian WHMIS Symbols: ND

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

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