

### Safety Data Sheet

**Product No. 18315 Dimethylaminoethanol (DMAE)**

**Issue Date (04-09-15)**

**Review Date (08-14-15)**

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#### 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**

**Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)**

**International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)**

**Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.**

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#### 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)

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**Section 3: Composition / Information on Ingredients**

<b>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</b>	<b>%</b>	<b>OSHA PEL mg/m3</b>	<b>ACGIH TLV mg/m3</b>	<b>NTP</b>	<b>IARC</b>	<b>OSHA regulated</b>
2-dimethylaminoethanol (108-01-0) EC number: 203-542-8 Index number: 603-047-00-0	≤100	NE	NE	No	No	No

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**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

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### **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: CO<sub>2</sub>, 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.

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### **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.

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### **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

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### **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)

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### **Section 9 Physical and Chemical Properties**

Appearance and Physical State: Colorless liquid.

Odor (threshold): Ammonia-like (ND)

Specific Gravity (H<sub>2</sub>O=1): 0.89 g/cm<sup>3</sup> (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

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### **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.

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### **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)
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Dermal LD50	1370 mg/kg (rabbit)
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Inhalative LC50/4 h	3.25 mg/l (mouse)
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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.

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## **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

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## **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.

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## **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

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## **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.

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### **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

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### **Disclaimer**

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.