Material Safety Data Sheet
Product No. 18315 Dimethylaminoethanol (DMAE)
Issue Date (06-15-06)
Review Date (06-01-12)

Section 1: Product and Company Identification
Product Name: Dimethylaminoethanol (DMAE)
Synonym: Dimethylethanolamine, DMAE, DMEA, Epoxy Curing Agent S-1
Chemical Name: Ethanol, 2-(Dimethylamino)
Chemical Family: Alkyl Alkanol Amines
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.

Section 2: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m3</th>
<th>ACGIH TLV mg/m3</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylaminoethanol (108-01-0)</td>
<td>99</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 3: Hazard Identification

Emergency overview
Appearance: Clear, colorless liquid.
Immediate effects: Corrosive.

Potential health effects
Primary Routes of entry: Skin, eyes, inhalation and ingestion.
Signs and Symptoms of Overexposure: ND
Eyes: Corrosive to eyes. Contact with eyes may cause blindness.
Skin: Harmful if absorbed through the skin; corrosive to skin.
Ingestion: Harmful if swallowed.
Inhalation: Harmful if inhaled; corrosive to mucous membrane. Inhalation causes severe damage to the upper respiratory tract.
Chronic Exposure: This chemical may stimulate the central nervous system, possibly resulting in restlessness, coordination, tremors and convulsions.
Chemical Listed As Carcinogen Or Potential Carcinogen: This chemical is not classified as a carcinogen by IARC, NTP, or OSHA.
See Toxicological Information (Section11)
**Potential environmental effects**
See Ecological Information (Section 12)

---

**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

Eye(s) Contact: Flush with plenty of water for at least 15 minutes. Get medical attention. Begin treatment as quickly as possible.
Skin Contact: Wash with soap and water. Get medical attention. Remove contaminated clothing and clean. Destroy contaminated shoes. Begin treatment as quickly as possible.
Inhalation: Remove to fresh air. If not breathing give artificial respiration. Give oxygen. Get medical attention.
Ingestion: Do not induce vomiting. Give plenty of water. Get medical attention.

**Note to physician**
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

---

**Section 5: Fire Fighting Measures**

Flash Point: 40 °C (104 °F) TAG CC
Flammable Limits: NE
Auto-ignition point: NE
Fire Extinguishing Media: Water spray, water stream, CO2, dry chemical, alcohol foam.
Special Fire Fighting Procedures: Do not direct water stream into burning liquid. Water may be effective for cooling but not for extinguishing.
Unusual Fire and Explosion Hazards: NE
Hazardous combustion products: Carbon monoxide, carbon dioxide, and nitrogen oxides.
DOT Class: Corrosive

---

**Section 6: Accidental Release Measures**
Steps to be Taken in Case Material is Released or Spilled: Small Spills (less than one gallon): Flush spill area with water. Larger Amounts: Absorb with sand or inert material. Place in container and seal. Flush spill area with water. Absorbed and bulk material may be incinerated but toxic combustion products must be handled appropriately.
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: Do not get in eyes, on skin or clothing. Do not breathe dust, vapor, mist, gas. Keep container closed. Keep away from heat, sparks, and open flames. Empty container may contain hazardous residues. Do not cut, drill, grind, or weld on container. Store away from acids and oxidizers. Read label before use.
Storage temperature: Ambient.
Storage Pressure: ND

---

**Section 8: Exposure Controls / Personal Protection**

**Engineering Controls**
Ventilation required: Use with adequate ventilation.

**Personal Protection Equipment**
Respiratory protection: Use cartridge type with mist filters.
Protective gloves: Synthetic rubber gloves.
Skin protection: Protective apron.
Eye protection: Face shield with goggles.
Additional clothing and/or equipment: Boots.

**Exposure Guidelines**
See Composition/Information on Ingredients (Section 2)

---

**Section 9 Physical and Chemical Properties**
Appearance and Physical State: Clear, colorless liquid
Odor (threshold): Ammonia-like
Specific Gravity (H₂O=1): 0.88 – 0.89 @ 20° C (68° F)
Vapor Pressure (mm Hg): 4 H @ 20° C (68° F)
Vapor Density (air=1): 3.1
Percent Volatile by volume: 100%

Evaporation Rate (butyl acetate=1): ND
Boiling Point: 130 – 137° C (266 – 279° F)
Freezing point / melting point: -59° C (-74° F) / NA
pH: ND
Solubility in Water: Complete (miscible)
Molecular Formula: (CH₃)₂N(CH₂CH₂OH)
Molecular Weight: 89.1

---

**Section 10: Stability and Reactivity**
Stability: Stable
Conditions to Avoid: Heat, Flames, Acids, Oxidizers
Materials to Avoid (Incompatibility): Strong acids, strong oxidizers. Reaction may generate heat or toxic and irritating fumes.
Hazardous Decomposition Products: Thermal decomposition products include carbon monoxide, carbon dioxide, and nitrogen oxides.
Hazardous Polymerization: ND

---

**Section 11: Toxicological Information**
Results of component toxicity test performed: (Oral, Rat): LD₅₀ = 2340 mg/kg. (Dermal, Rabbit): LD₅₀ = 1370 mg/kg. (Inhalation, Rat): LC₅₀ (4 hr) = 1640 ppm.
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**
Ecological Information: ND
Chemical Fate Information: ND
Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: Not listed.
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
Packaging group: II
UN Number: UN2051
Limitations: 1L
IATA: Proper shipping name: 2-Dimethylaminoethanol
Hazard Class: 8
Packaging group: II
UN Number: UN2051
Limitations: 1L
IMO: Proper shipping name: 2-Dimethylaminoethanol
Class: 8
UN Number: UN2051
Packaging group: II
Marine Pollutant: No
Canadian TDG: Proper shipping name: 2-Dimethylaminoethanol

Section 15: Regulatory Information
United States Federal Regulations
SARA: Not listed.
SARA Title III: Not listed.
RCRA: Not listed.
TSCA: This chemical is reported on the United States Environmental Protection Agency Toxic Substances Control Act Inventory.
CERCLA: Not listed.

State Regulations
California Proposition 65: As of the date on which this Material Safety Data Sheet was prepared, this chemical was not listed under California Proposition 65.
Pennsylvania: This chemical is listed as a "Hazardous Substance": under the Pennsylvania Right to Know Act.

International Regulations
Canada WHMIS: This product is listed on the CPR inventory list.
Europe EINECS Numbers: Dimethylaminoethanol (108-01-0): EINECS#: 203-542-8

Section 16: Other Information
Label Information: ND
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND
NFPA Hazard Rating: Health: 2; Fire: 2; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

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.