TED PELLA, INC.
Microscopy Products for Science and Industry

Safety Data Sheet

Product No. 18241 BDMA, Benzyldimethylamine
Issue Date (07-05-15)
Review Date (11/04/2021) Rev. 04

Section 1: Product and Company Identification

Product Name: BDMA, Benzyldimethylamine
Synonym: N,N-Dimethylbenzylamine
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

GHS Hazard Pictograms

GHS02 GHS05 GHS07

Signal Word: DANGER

GHS Categories: Hazard Statements

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

Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
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.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, regional, national, international regulations

Health Effects:
NFPA Hazard Rating: Health: 3; Fire: 2; Reactivity: 1
HMIS® Hazard Rating: Health: 3; Fire: 2; Reactivity: 1
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment:
PBT: NA
vPvB: NA

Section 3: Composition / Information on Ingredients

Chemical Name	CAS-No.	EC-No.	Index-No.
Benzyldimethylamine	103-83-3	203-149-1	612-074-00-7

Trade name: (BDMA) N-Benzyldimethylamine

Section 4: First Aid Measures

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.

After 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.

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

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.

Section 5: Fire Fighting Measures

Extinguishing media
Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: Mouth respiratory protective device.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
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.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

Protective Action Criteria (PAC) for Chemicals Estimates of Exposure

PAC-1	Mild, transient health effects.	0.62 mg/m^3
PAC-2	Irreversible or other serious health effects that could impair the ability to take protective action.	6.8 mg/m3
PAC-3	Life-threatening health effects	41 mg/m^3

PAC values are based on the following exposure limit values:
Acute Exposure Guideline Levels (AEGL) values published by the U.S. Environmental Protection Agency (EPA)
Emergency Response Planning Guideline (ERPG) values produced by the American Industrial Hygiene Association (AIHA)
Temporary Emergency Exposure Limit (TEEL) values developed by SCAPA

Section 7: Handling and Storage

Precautions for safe handling:

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.

Information about protection against explosions and fire:

- Keep ignition sources away - Do not smoke.
- Protect from heat.
- Protect against electrostatic charges.

Conditions of safe storage:

- Storerooms and receptacles: No special requirements
- Storage on one common storage facility: Not required
- Other: Keep receptacle tightly sealed. Protect from heat and direct sunlight.

Section 8: Exposure Controls / Personal Protection

Components with limit values that require monitoring at the workplace: Not required.

Engineering Controls

- Ventilation required:
- Use in chemical fume hood.
- Ensure good ventilation/exhaustion at the workplace.
- Additional equipment: Eyewash station.

Personal Protection Equipment

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.
Skin protection:	Wear gloves and protective clothing.
Eye protection:	Tightly sealed goggles.

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.

Section 9 Physical and Chemical Properties

Appearance and Physical State:	Light yellow liquid
Odor	Amine-like
Oder threshold	Not determined
pH	Not determined
Melting Point/Melting Range	-73 ºC (-103 ºF)
Boiling Point/Boiling Range	184 ºC (363.2 ºF)
Flash Point	54 ºC (19.2 ºF)
Flammability (solid, gaseous)	Not flammable
Decomposition temperature	Not determined
Auto igniting	Not determined
Danger of Explosion	Product is not explosive, however, formation of explosive air/vapor mixtures are possible
Explosion Limits:	
• Lower:	Not determined
• Upper:	Not determined
Vapor pressure @ 20 ºC (68 ºF)	2.8 hPa (2.1 mm Hg)
Density @ 20 ºC (68 ºF)	0.9 g/cm^3 (7.5105 lbs/gal)
Relative density	Not determined
Vapor density	Not determined
Evaporation rate	Not determined
Solubility in / Miscibility with Water	Fully miscible
Partition coefficient (n-octanol/water)	Not determined
Dynamic Viscosity	Not determined
Kinematic Viscosity	Not determined
VOC content	0.00 %
Solids content	0.0 %

Section 10: Stability and Reactivity

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks.
Materials to Avoid (Incompatibility):	Strong oxidizing agents.
Hazardous Decomposition Products:	No dangerous decomposition products known.
Hazardous Polymerization:	ND

Section 11: Toxicological Information

Results of component toxicity test performed:

Acute toxicity:

LD/LC50 values that are relevant for classification: 103-83-3 Benzyldimethylamine

Oral LD50 265 mg/kg (rat)

Dermal LD50 1,660 mg/kg (rabbit)

Inhalation LC50/4 h 2.06 mg/l (rat

Human experience:

On the skin: Strong 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.

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

Section 12: Ecological Information

Toxicity

Toxicity to fish static test LC50	Pimephales promelas (fathead minnow) - 37.8 mg/l -96h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48h (Regulation (EC) No. 440/2008, Annex, C.2)
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - 1.34 mg/l -72h (Directive 67/548/EEC, Annex V, C.3.)
	static test NOEC - Desmodesmus subspicatus (green algae) - 0.24 mg/l – 72h
Toxicity to bacteria	static test EC50 - Pseudomonas putida - 749.6 mg/l - 17 h (DIN 38412) EC50 - Bacteria - 530 mg/l - 17 h Remarks: (External MSDS)

Persistence and Degradability

Biodegradability	aerobic Result: 2 % - Not readily biodegradable. (OECD Test Guideline 301C)
Bio-accumulative Potential	No data available
Mobility in Soil	No data available
Results of PBT and vPvB Assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	Do not allow product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or un-neutralized. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

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.
Dispose of contents/container in accordance with local, regional, national, international regulations

Section 14: Transportation Information

US DOT 49 CFR Regulations.

Proper Shipping Name	Benzyldimethylamine
UN Number	UN2619
Hazard Class	8 (3) Corrosive substances
Packing Group	II
Limited Quantity	Passenger aircraft/rail: 1 L Cargo aircraft: 30L

IMDG

Proper Shipping Name	BENZYLDIMETHYLAMINE
UN Number	UN2619
Hazard Class	8 (3) Corrosive substances
Packing Group	II
Limited quantity (LQ)	1 L
Excepted quantity (EQ)	E2
Quantity per inner packaging	30 ml (Max)
Quantity per outer packaging	500 ml (Max)

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-E, S-C

IATA

Proper Shipping Name	Benzyldimethylamine
UN Number	UN2619
Hazard Class	8 (3) Corrosive substances
Packing Group	II
Excepted quantity (EQ)	E2
Limitation Quantity	Passenger/Cargo aircraft 0.5L Cargo aircraft: 30L

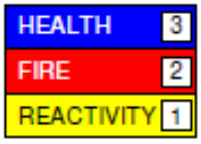
Section 15: Regulatory Information

United States Federal Regulations

· *NFPA ratings (scale 0 - 4)*

Health = 3
Fire = 2
Reactivity = 1

· *HMIS-ratings (scale 0 - 4)*



Health = 3
Fire = 2
Reactivity = 1

SDS 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.
TSCA:	Substance is active.
CERCLA:	Substance is not listed.

State Regulations

California Proposition 65: Substance is not listed.

International Regulations

Canada WHMIS: ND
Europe EINECS Numbers: ND
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Disclaimer

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