

Material Safety Data Sheet

Version 1.1

Revision Date 5/1/23

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Epoxy poly-(N,N-dimethylacrylamide) or ePDMA

Product number: MCP-1

Company:

Lucidant Polymers, LLC
1230 Bordeaux Dr.
Sunnyvale, CA 94089-1202
Telephone: 408-569-8607
Emergency Phone #: 408-569-8607

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Emergency overview:

WHMIS classification: Not WHMIS controlled.

GHS classification: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS classification:

Health hazard: 0
Flammability: 0
Physical hazards: 0

Potential health effects:

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: (DMA)_n bearing epoxy groups

Formula: Poly(N,N-dimethylacrylamide): (C₅H₉NO)_n

Concentration: ≤ 100%

CAS registry number: Poly(N,N-dimethylacrylamide): 26793-34-0

Molecular Weight: approx. 1,000,000 g/mol

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and rinse immediately with plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Conditions of flammability:	Not flammable or combustible.
Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters:	Wear self contained breathing apparatus for firefighting if necessary.
Hazardous combustion products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO _x).
Explosion data:	Sensitivity to mechanical impact: no data available Sensitivity to static discharge: no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:	Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature 2–8 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment:

- Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures: General industrial hygiene practice.
- Specific engineering controls: Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	dry white fibrous solid
Safety data	
pH	no data available
Melting point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	freely soluble

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

Keep away from open flames, hot surfaces, and sources of ignition.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	no data available
Irritation and corrosion	no data available
Sensitization	no data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Polyacrylamide is not toxic. However, residual acrylamide monomer is a neurotoxin and suspected carcinogen. Residual dimethylacrylamide is minimized, if present at all; its concentration is assumed to be less than 0.1% due to the energetic favorability of this reaction to completion, after catalysis during manufacturing. Lucidant polymers recommends discarding product containers in the trash as typical landfill waste.

12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Elimination information (persistence and degradability)

no data available

Further information on ecology

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no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Rinse thoroughly to remove all product, dispose of rinse water in accordance with local regulations.

14. TRANSPORT INFORMATION

No considerations. This product contains inert polymers useful for biological research, is safe and stable at room temperature, and poses no special risks or considerations for quantities of any size. Handle as stable.

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

TSCA Status

Not on TSCA Inventory

DSL Status

This chemical is not on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components listed.

Pennsylvania Right To Know Components

No components listed.

New Jersey Right To Know Components

No components listed.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

MSDS: MCP-1

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lucidant Polymers, LLC, shall not be held liable for any damage resulting from handling or from contact with the above product.