



SAFETY DATA SHEET

AM-44

Issue Date: 01 Jan 2016

Revision Date: N/A

PRODUCT IDENTIFICATION

Company Product Name: AM-44

Other/Generic Names: Acidic CA/CTA Membrane Cleaner.

Product Use and Restrictions on Use Membrane Cleaner.

Supplier: Applied Membranes, Inc.
2450 Business Park Dr
Vista, CA 92081

For More Information Call: (760) 727-3711
(Monday-Friday, 8:00am-5:00pm)

For Emergency Call: For Chemical Emergency, Spill Leak Fire Exposure or Accident - Call CHEMTREC Day or Night DOMESTIC NORTH AMERICA 800-424-9300 INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

HAZARDS IDENTIFICATION AND COMPOSITION/INFORMATION ON INGREDIENT

Hazardous Ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>Weight %</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
None	---	---	---	---

FIRST AID MEASURES

Effects of Exposure

SKIN: Mild irritant to skin.

EYES: Irritant to eyes. May cause burns.

INHALATION: Irritant to mucous membranes and respiratory system. Dust may cause mild symptoms of respiratory irritation.

INGESTION: Irritant to mucous membranes and digestive tract.



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Emergency First Aid

- SKIN:** Flush all affected areas with plenty of water for several minutes. Remove and clean any contaminated clothing and shoes. Seek medical attention if skin irritation occurs.
- EYES:** Flush the eyes with plenty of running water for at least 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Seek medical attention if eye irritation occurs.
- INHALATION:** If inhaled, remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.
- INGESTION:** If swallowed, immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed at the back of the victim's tongue. Give fluids until vomitus is clear. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth.

FIRE FIGHTING MEASURES

Extinguishing Media: Water, foam, carbon dioxide, dry chemicals.

Special Fire Fighting Procedures: None.

Unusual Fire and Explosion Hazards: Under certain conditions this material could create a dust explosive hazard due to fine particles present. Sulfur Dioxide (SO₂)/Sulfur Trioxide (SO₃), ammonia, and carbon and nitrogen oxides may be released during a fire.

Upper Explosive Limit (UEL): 8 gm/ft³

Lower Explosive Limit (LEL): 65 gm/ft³

Flash Point/ Method: Non-combustible.

ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Neutralize and flush with water or sweep and shovel.

Waste Disposal: Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable regulations.



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HANDLING AND STORAGE

Precautions To Be Taken In Handling and Storing: Containers should be stored in a cool, dry, well-ventilated area. Store away from foodstuffs or animal feed. Exercise caution to prevent damage to or leakage from containers.

Other Precautions: Aqueous solutions of citric acid can, if in contact with reactive metal (iron, zinc or aluminum), form hydrogen which may form explosive mixtures.

EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respiratory protection if airborne dust is expected.

VENTILATION: Good general mechanical ventilation should be sufficient for most conditions. Local exhaust sufficient to control dust.

PROTECTIVE CLOTHING: None.

EYE PROTECTION: Wear chemical goggles if airborne dust is expected.

GLOVES: Use chemically resistant glove.

OTHER PROTECTIVE EQUIPMENT: No special requirements...

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White Powder.

PHYSICAL STATE: Solid

ODOR: No distinct odor.

SOLUBILITY IN WATER : >50%

pH (1% solution): 2-3

EVAPORATION RATE (Water=1): Non-volatile.

COEFFICIENT OF WATER/OIL Not Available.

DISTRIBUTION:

STABILITY AND REACTIVITY

STABILITY: Stable under normal storage and use conditions...

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Prolonged heating, greater than 392°F which will result in loss of water hydration. Strong oxidizing agents such as chromic acid, potassium permanganate and high concentrations



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of hydrogen peroxide. Aqueous solutions of this material are corrosive to common metals such as aluminum, copper alloys, galvanized iron and nickel.

INCOMPATIBILITIES: Usual incompatibilities of organic acids. This material is degraded by strong oxidizing agents such as chromic acid, potassium permanganate and high concentrations of hydrogen peroxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products may be hazardous. Sulfur Dioxide (SO₂)/sulfur trioxide (SO₃), ammonia, and carbon and nitrogen oxides may be released during a fire.

TOXICOLOGICAL INFORMATION

Ingredients found on one of the three OSHA designated carcinogen lists are listed below.

<u>Ingredient Name</u>	<u>NTP Status</u>	<u>IARC Status</u>	<u>OSHA List</u>
No ingredient listed in this section	----	----	----

ECOLOGICAL INFORMATION

Ecotoxicity: The following ecotoxicity data is available for AM-44.

Daphnia EC50 48h → No data available.
 Fish LC50 96h → No data available.
 Algae EC50 72h → No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

DISPOSAL CONSIDERATIONS

No data available.



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TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not Regulated.
DOT HAZARD CLASS: Not Regulated.
DOT LABELS: Not Required.
DOT MARKING: Not Required.
DOT PLACARD: Not Required.
HAZARDOUS SUBSTANCE/RQ: Not Applicable
49 STCC NUMBER: None.

Emergency Accident Precautions and Procedure: See instructions for release or spill.

REGULATORY INFORMATION

Product or Component of Product/ CAS No.: Tetrasodium Ethylenediaminetetraacetate/64-02-8.
SARA Section 302 EHS RQ: Not Listed.
SARA Section 302 EHS TPQ: Not Listed.
SARA Section 313 Chemicals List: Not Listed.
CERCLA Sec. 103: Not Listed.
Reportable Quantity (RQ) Sec. 302.4: Not Listed.
RCRA Sec. 261.33: Not Listed.
Material Is Reported in EPA TSCA Inventory List? Yes.
California Prop. 65: Yes.

Hazardous Categories for SARA Section 311/312 Reporting

Immediate (Acute) Health: Yes.
Delayed (Chronic) Health: No.
Fire: No.
Pressure: No.
Reactive: No.

SARA SECTION 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.



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SARA SECTION 302 EHS TPQ: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk(*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 lbs.

SARA 313 CHEMICALS LIST: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.

CERCLA SEC. 103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund).

REPORTABLE QUANTITY (RQ) SEC. 302.4: Chemicals listed on 40 CFR 302.4. Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center.

RCRA SEC. 261.33: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33.

OTHER INFORMATION

Current Issue Date: 01 Jan 2016

Previous Issue date: N/A

Changes to SDS from Previous Issue Date are Due to the following: No Changes