



SAFETY DATA SHEET

AM-23

Issue Date: 01 Jan 2016

Revision Date: N/A

PRODUCT IDENTIFICATION

Company Product Name: AM-23

Other/Generic Names: Alkaline TFC 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 & COMPOSITION/INFORMATION ON INGREDIENT

<u>Ingredient Name</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Weight %</u>	<u>CAS No.</u>
AM-23	2 mg/m ³ , 8 hr TWA	2 mg/m ³ , ceiling	>10%	1310-73-2

Notes: TLV-TWA: Threshold Limit Value – Time Weighted Average for concentration of the chemical substance in the ambient workplace air for a normal 8-hour workday, 40-hour workweek, to which nearly all workers may be repeatedly exposed without adverse effect. American Conference of Governmental Industrial Hygienists, 1988/1989 Edition. OSHA PEL: OSHA Permissible Exposure Limit, 8-hour TWA. 29CFR 1910.1000.

FIRST AID MEASURES

Effects of Exposure

SKIN: Destructive to tissue contacted and produces severe burns. LD50 = 1.35 gm./kg. (rabbit).

EYES: Is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.



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- INHALATION:** Inhalation of dust, mist, or spray may cause damage to the upper respiratory tract and even to the lung tissue, which could produce chemical pneumonia depending on the severity of exposure.
- INGESTION:** Can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach. LD50 = 140 mg./kg. (rat)..

Emergency First Aid

- SKIN:** Immediately wash contaminated areas with plenty of water for 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear which cannot be decontaminated. Seek medical attention immediately.
- EYES:** Flush immediately with large amounts of water for at least 15 minutes, holding eye lids apart to ensure flushing of the entire surface. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Seek medical attention immediately.
- INHALATION:** Get person out of contaminated area to fresh air. If breathing has stopped, resuscitate and administer oxygen if readily available. Seek medical attention immediately.
- INGESTION:** Do not give anything by mouth to an unconscious person. Do not induce vomiting. Give large quantities of water. If available, give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. Seek medical attention immediately.

FIRE FIGHTING MEASURES

- FLASH POINT/METHOD:** Nonflammable.
- EXTINGUISHING MEDIA:** This product is not combustible. Water spray, foam, carbon dioxide, or dry chemical may be used in areas where product is stored
- SPECIAL FIRE FIGHTING PROCEDURES:** Protective clothing and pressure-demand, self-contained breathing apparatus should be worn by firefighters in areas where product is stored
- UNUSUAL FIRE & EXPLOSION HAZARDS:** Under certain conditions this material could create a dust explosive hazard due to fine particles present.

ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Contain and clean up immediately. Spills should be removed by using a vacuum truck. Neutralize remaining traces of material with any dilute inorganic acid such as hydrochloric, sulfuric, nitric, phosphoric acid. The spill area should then be flushed with water followed by liberal covering of sodium bicarbonate. All cleanup material should be removed and placed in approved containers, labeled and stored in a safe place to await proper treatment or approved containers. Persons performing cleanup work should wear adequate personal protective equipment and clothing.



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HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Product can react violently with water, acids and other substances. Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and can cause death.

Waste Disposal: The materials resulting from cleanup operations may be hazardous waste and therefore, subject to specific regulations. Package, store, transport, and dispose of all cleanup materials and any contaminated equipment in accordance with all applicable federal, state, and local health environmental regulations. Shipments of waste materials are subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible federal, state, and local agencies receive proper notification of spill and disposal methods.

EXPOSURE CONTROLS/PERSONAL PROTECTION

- PROTECTIVE CLOTHING:** Use coveralls closed to the neck, and chemically resistant shoes. Wash contaminated clothing with soap and water and dry before reuse.
- EYE PROTECTION:** Face shield and goggles or chemical goggles should be worn.
- RESPIRATORY PROTECTION:** Respiration protection is not required under normal use. Use NIOSH/MSHA approved respirators where dust, mist or spray may be generated.
- VENTILATION:** Use adequate local exhaust ventilation where dust, mist, or spray may be generated. Where carbon monoxide or other reaction products may be generated, special ventilation may be required.
- GLOVES:** Impervious gloves should be worn. Gloves may be decontaminated by washing with mild soap and water. Natural and butyl rubber have been suggested.



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PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White pellets.
PHYSICAL STATE:	Solid
ODOR:	No distinct odor.
SOLUBILITY IN WATER	111 g/ 100 g of water
pH (0.5% soln.)	14
BOILING POINT:	1390°C (2534°F)
VAPOR PRESSURE (mmHg):	Negligible.
VAPOR DENSITY (air=1.0)	>1.0
SPECIFIC GRAVITY:	Approx. 2.13

STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

POSSIBILITY OF HAZARDOUS RECTIONS: Reacts with acids to form toxic and irritating sulfur dioxide gas.

CONDITIONS TO AVOID: Contact with water, strong acids, leather or wool, and reactive metals.

INCOMPATIBILITIES: Avoid contact with water. This product may be added slowly to water or acids with dilution and agitation to avoid violent exothermic reaction. When handling this product. Avoid contact with aluminum, tin, zinc, and alloys containing these metals. Do not mix with strong acids without dilution and agitation to prevent violent or explosive reaction. Avoid contact with leather or wool.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions it may decompose to give off toxic materials.

HAZARDOUS POLYMERIZATION: Will not occur.

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	----	----	----



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ECOLOGICAL INFORMATION

Ecotoxicity: The following ecotoxicity data is available for AM-88.

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.

TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Sodium Hydroxide, Solid
 DOT HAZARD CLASS: 8
 DOT LABELS: Corrosive
 ID NUMBER: UN1823
 DOT PLACARD: Corrosive
 HAZARDOUS SUBSTANCE/RQ: Not Applicable
 PACKING GROUP: II

Emergency Accident Precautions and Procedure: 800-424-9300

REGULATORY INFORMATION

<u>Ingredient Name</u>	<u>Comment</u>
No Ingredients listed in this section	----



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OTHER INFORMATION

HMIS Rating:

HEALTH	3
FLAMMABILITY	0
REACTIVITY	1

Hazard rating: 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe; *Chronic health effect



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SPECIAL HMIS RATING NOTES:

Protection = H (Safety goggles, gloves, apron and a vapor respirator)