

C-C2510-A23, C-C2520-A23

Material Safety Data Sheet

*BB size not available – Cannot ship by Air

Issue Date: 9/20/05 Revision Date: 12/02/08 Supersedes: 12/02/08

Product Identification:

Manufacturer's Name:	Applied Membranes, Inc.
Address:	2450 Business Park Dr., Vista, CA 92081
Phone No.:	(760) 727-3711
Applied Membranes, Inc. Name:	C-C2510-A23, C-C2520-A23
Trade Name:	Alkaline TF Type RO Membrane Cleaning Cartridge
Emergency Phone Number:	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)

Hazardous Ingredients*:

<u>Material Name/CAS no.</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
(trade secret)/1310-73-2	>10	2 mg./cu.m. 8 hr.TWA	2 mg./cu.m. ceiling

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

*Product conforms to ORM-D limited quantity.

First Aid Measures:

Effects of Exposure

Oral Ingestion:	Can cause severe burns and complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach. LD50 = 140 mg./kg. (rat).
Eye Contact:	Is destructive to eye tissues on contact. Will cause severe burns that result in damage to the eyes and even blindness.
Skin Contact:	Destructive to tissue contacted and produces severe burns. LD50 = 1.35 gm./kg. (rabbit).
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.

Emergency First Aid

Oral 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.
Eye Contact:	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.
Skin Contact:	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.
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.

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 and 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.

Handling and Storage:

Keep in closed containers.

Precautions To Be Taken In Handling And Storing:

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 Control/ Personal Protection:

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.
Protective Clothing:	Use coveralls closed to the neck, and chemically resistant shoes. Wash contaminated clothing with soap and water and dry before reuse.
Gloves:	Impervious gloves should be worn. Gloves may be decontaminated by washing with mild soap and water. Natural and butyl rubber have been suggested.
Eye Protection:	Face shield and goggles or chemical goggles should be worn.

Physical and Chemical Properties:

Appearance and Odor:	White pellets with no distinct odor.
Physical State:	Solid.
Boiling Point:	1390 °C (2534 °F)
pH (0.5% soln.):	14
Solubility in Water:	111 g/ 100 g of Water
Vapor Density (Air = 1)	>1.0
Vapor Pressure (mmHg)	Negligible
Specific Gravity	Approx. 2.13

Stability and Reactivity:

Stability:	Stable under normal conditions
Incompatibility:	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.
Conditions to Avoid:	Contact with water, strong acids, leather or wool, and reactive metals.

Transportation Data:

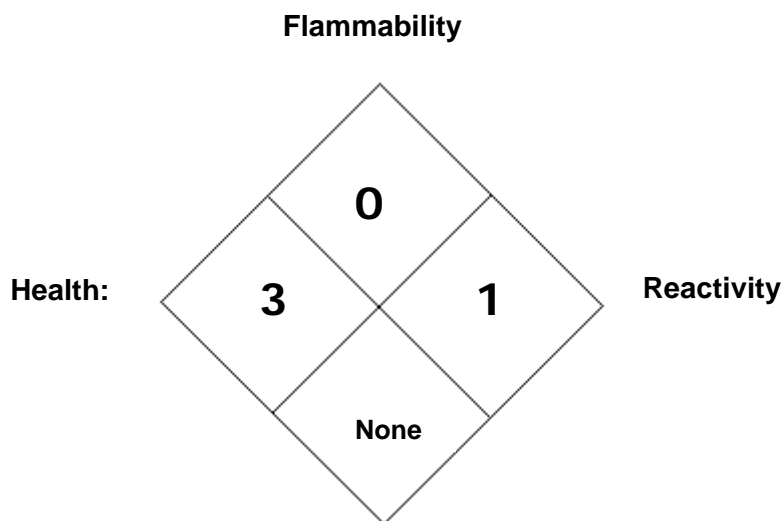
DOT Proper Shipping Name:	Not Regulated – ORM-D
Hazardous Substance/RQ:	Not applicable.

HMIS Rating

HEALTH	3
FLAMMABILITY	0
REACTIVITY	1

Key

- 4= Severe
- 3= Serious
- 2= Moderate
- 1= Slight
- 0= Minimal



SPECIAL HMIS RATINGS NOTES:

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