

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-930A

ISSUE DATE: 12/01/94

PAGE 1 OF 4

1. PRODUCT IDENTIFICATION

Product Name

ARMAKLEEN E-2001

Emergency Phone:

1-609-683-5900 (U.S.A.)

Medical Emergency Phone:

1-800-228-5635

Ext. 007 (U.S.A.)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary Formula - Contains no hazardous components at 1% or more listed in 29 CFR 1910, Subpart Z. Contains no components that are reported to be carcinogenic by any reference source including IARC, OSHA, NTP and EPA.

Not hazardous under OSHA Standard 29 CFR 1910.1200.
Not a WHMIS controlled product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Slight to very hazy liquid.
Slight/mild odor.
Not a primary skin or eye irritant.
Not a fire hazard.
No other significant health or environmental effects associated with this material.

HMIS Rating

Health	0
Fire	0
Reactivity	0

Potential Health Effects

EYE: Mild irritation is possible on repeated or prolonged contact. Effects will be minimized with washing.

SKIN CONTACT: May cause mild irritation from repeated, prolonged, or occluded contact.

INGESTION: Non-toxic. Ingestion of small amounts (tablespoonfuls) are not likely to cause abdominal discomfort or injury. Ingestion of larger amounts may cause abdominal discomfort or injury.

INHALATION: Prolonged inhaling of mist may irritate upper respiratory tract.



MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-930A

ISSUE DATE: 12/01/94

PAGE 2 OF 4

SUBCHRONIC EFFECTS/CARCINOGENICITY: None known. Contains no ingredient listed as a carcinogen or potential carcinogen by IARC, NTP, OSHA or ACGIH.

4. FIRST AID MEASURES

SKIN: Remove wet/contaminated clothing. Flush exposed areas with water.

EYES: Immediately flush eyes with clean, flowing water, low pressure and lukewarm if possible, occasionally lifting upper and lower eyelids. After one minute, remove contact lenses if present. Continue flushing for 15 minutes. Seek medical attention if irritation develops.

INHALATION: Move from area of exposure. Treat symptomatically.

INGESTION: If over-exposure occurs and person is conscious, give a glass of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms develop.

NOTE TO PHYSICIAN: Large doses may produce systemic alkalosis. Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: Not Applicable

METHOD USED: Not Applicable

FLAMMABLE LIMITS

LFL: Not Applicable

UFL: Not Applicable

EXTINGUISHING MEDIA: Non-flammable. Use extinguishing media for surrounding fire.

FIRE-FIGHTING INSTRUCTIONS: Carbon dioxide may be generated in extreme heat from decomposition or from exposure to incompatible materials (acids). Wear self-contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear).

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

6. ACCIDENTAL RELEASE MEASURES

Will create extremely slippery conditions if spilled. Close off area of spill to traffic. Exercise proper cautions during clean-up. Be sure cleaned area is dry or slip-free before reopening to traffic. Large spills should be contained and treated to lower Ph, and disposed of in suitable waste containers. Flush small quantities to sewer or waste water system, or pick up with absorbent material for disposal (See Section 12). Flush to sewer only as local regulations permit. Prevent eye and skin contact by wearing appropriate personal protective equipment (See Section 8).

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-930A

ISSUE DATE: 12/01/94

PAGE 3 OF 4

7. HANDLING AND STORAGE

Store in original container. Keep containers tightly closed. Store away from incompatible substances (acids). Prevent skin and eye contact during handling by wearing appropriate protective equipment (See Section 8).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: None under normal use conditions. If mists are generated, use a NIOSH approved respirator with a dust/mist cartridge.

PROTECTIVE GLOVES: Impervious gloves recommended for prolonged contact with solution during product use or for cleaning up spills.

EYE PROTECTION: Chemical goggles recommended when handling solution and for cleanup of spills.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Full cover clothing is sufficient. Impermeable apron to protect clothes where splashing may occur.

PROTECTIVE WORK/HYGIENIC PRACTICES: No special requirements with respect to chemical exposure other than those noted above. Specific requirements with respect to equipment are the responsibility of the user.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Slight to very hazy

ODOR: Low

PHYSICAL STATE: Liquid

Ph AS IS: 10.7 - 11.2 @ 25°C

VAPOR PRESSURE: About 17mm (Water Vapor) @ 25°C

BOILING POINT: 100-110°C

FREEZING POINT: -10°C - 0°C

SOLUBILITY IN WATER: Complete

SPECIFIC GRAVITY (Water = 1): Approx. 1.15 @ 25°C

APPARENT DENSITY: 9.60 lbs/gal @ 25°C

SURFACE TENSION: 34 dynes/cm @ 25°C

VISCOSITY: Approximately 500 cps @ 25°C

% VOLATILE: 79% as water; no VOC's with < C₁₂ and/or VP > 2mm Hg

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Acids

INCOMPATIBILITY WITH OTHER MATERIALS: Reacts with acids to release carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: May release carbon monoxide, carbon dioxide, and fumes of SO₂.

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-930A

ISSUE DATE: 12/01/94

PAGE 4 OF 4

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: OECD Guidelines, 72-hour observation: Non-irritating to washed eyes.

SKIN EFFECTS: Not a primary skin irritant. PDII (rabbit) was 1.10, 4 hrs. semi-occluded.

ACUTE ORAL EFFECTS: Non-toxic. Rat LD₅₀ > 5000 mg/kg with no observed adverse effects at this level.

12. DISPOSAL CONSIDERATIONS

Dispose of spilled or waste product and other large amounts in accordance with all local, state and federal environmental regulations. Depending on size, rinse containers and either discard in trash, recycle, or dispose of in licensed facility in accordance with existing local regulations and programs.

13. TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Not regulated

TECHNICAL SHIPPING NAME: Not regulated - Shipped as ARMAKLEEN E-2001

D.O.T. HAZARD CLASS: None

U.N./N.A. NUMBER: None

HAZARDOUS SUBSTANCE/RQ: None

D.O.T. LABEL: None

D.O.T. PLACARD: None

14. MISCELLANEOUS INFORMATION

Additional Regulations

The ingredients in this product are reported in EPA TSCA Inventory.

The ingredients in this product are not listed as carcinogens or potential carcinogens by NTP Annual Report, IARC Group I or II, OSHA 29 CFR Part 1910 Subpart Z, or ACGIH Appendix A.

Contains no toxic chemicals subject to the reporting requirements of SARA Title III, Section 313. Contains no CERCLA reportable materials.

SUPERSEDES DATE: 08/01/94

This Product Safety Data Sheet is offered solely for your information, consideration and investigation. Church & Dwight Co., Inc. provides no warranties, either expressed or implied, and assumes no responsibility for the accuracy or completeness of data contained herein. Church & Dwight Co., Inc. urges persons receiving this information to make their own determination as to the information suitability for their particular application.