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National Foam

# MATERIAL SAFETY DATA SHEET #NMS300

## Aer-O-Lite 3%

### AQUEOUS FILM FORMING FOAM (AFFF) Liquid Concentrate

## Section 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Material Identification**
Product: Aer-O-Lite 3%, Fire Fighting Foam Concentrate
Synonyms: Aqueous Film Forming Foam (AFFF)
CAS No: Mixture - No single CAS # applicable

**Company Identification**
**Manufacturer:**
National Foam, Inc.
150 Gordon Drive
P.O. Box 695
Exton, PA 19341-0695
Emergency Phone Number (Red Alert): (610) 363-1400 (U.S.A.)
Fax (610) 524-9073
www.nationalfoam.com
www.Kidde-Fire.com

## Section 2. COMPOSITION / INFORMATION ON INGREDIENTS

| Components | CAS Number |
|---|---|
| Water | 7732-18-5 |
| 1, 2 Propanediol | 57-55-6 |
| Synthetic Detergents | Proprietary Mixture, no single CAS Number applicable |
| (2-Methoxymethylethoxy) Propanol | 34590-94-8 |
| Fluoroalkyl Surfactant | Confidential |

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## *Section 3.* HAZARDS IDENTIFICATION

**Potential Health Effects**

**Inhalation**
Vapors are minimal at room temperature. If product is heated or sprayed as an aerosol, airborne material may cause respiratory irritation.

**Skin Contact**
Contact with liquid may cause moderate irritation or dermatitis due to removal of oils from the skin.

**Eye Contact**
Product is an eye irritant.

**Ingestion**
Not a hazard in normal industrial use. Small amounts swallowed during normal handling operations are not likely to cause injury; swallowing large amounts may cause injury or irritation.

**Additional Health Effects**
Existing eye or skin sensitivity may be aggravated by exposure.

**Carcinogenicity Information**
No data available.

## Section 4. FIRST AID MEASURES

**Inhalation**
No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of airborne aerosol mists, remove to fresh air. Seek medical attention if effects occur.

**Skin Contact**
In case of skin contact, wash off in flowing water or shower. Launder clothing before reuse.

**Eye Contact**
In case of eye contact, flush eyes promptly with water for 15 minutes. Retract eyelids often to ensure thorough rinsing. Consult a physician if irritation persists.

**Ingestion**
Swallowing less than an ounce is not expected to cause significant harm. For larger amounts, do not induce vomiting. Give milk or water. Never give anything by mouth to an unconscious person. Seek medical attention.

## Section 5. FIRE FIGHTING MEASURES

**Flammable Properties**
Flash Point – Not applicable

**Fire and Explosion Hazards**
Avoid contact with water reactive materials, burning metals and electrically energized equipment.

**Extinguishing Media**
Product is an extinguishing media. Use media appropriate for surrounding materials.

**Special Fire Fighting Instructions**
This product will produce foam when mixed with water.

## Section 6. ACCIDENTAL RELEASE MEASURES

**Safeguards (Personnel)**
**NOTE:** Review FIRE FIGHTING MEASURES and HANDLING (Personnel) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

**Accidental Release Measures**

**Concentrate**
Stop flow if possible. Use appropriate protective equipment during clean up. For small volume releases, collect spilled concentrate with absorbent material; place in approved container. For large volume releases, contain and collect for use where possible. Flush area with water until it no longer foams. Exercise caution, surfaces may be slippery. Prevent discharge of concentrate to waterways. Disposal should be made in accordance with federal, state and local regulations.

**Foam/Foam Solution**
See above. Flush with water. Prevent discharge of foam/foam solution to waterways. Do not discharge into biological sewer treatment systems without prior approval. Disposal should be made in accordance with federal, state and local regulations.

## Section 7. HANDLING AND STORAGE

**Handling (Personnel)**
Avoid contact with eyes, skin or clothing. Avoid ingestion or inhalation. Rinse skin and eyes thoroughly in case of contact. Review HAZARDS and FIRST AID sections.

**Storage**
Recommended storage environment is between 20°F (-7°C) and 120°F (49°C). Store product in original shipping container or tanks designed for product storage.

## Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls**
Special ventilation is not required.

**Personal Protective Equipment**

**Respiratory**
Recommended exposure limits (OSHA-PEL and ACGIH-TLV) have not been determined for this material. The need for respiratory protection should be evaluated by a qualified health specialist.

**Protective Clothing**
Rubber or PVC gloves recommended.

**Eye Protection**
Safety glasses, face shield or chemical splash goggles must be worn when possibility exists for eye contact. Contact lenses should not be worn. Eye wash facilities are recommended.

**Other Hygienic Practices**
Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before re-use.

**Exposure Guidelines**

**Exposure Limits**
(2-Methoxymethylethoxy) Propanol (34590-94-8)

**PEL(OSHA)**
100 ppm, 8 hr. TWA Skin
150 ppm, 15 min. STEL Skin

**TLV (ACGIH)**
100 ppm, 8 hr. TWA Skin
150 ppm, 15 min. STEL Skin

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Data**

| | |
|---|---|
| Boiling Point: | Not applicable |
| Vapor Pressure: | Not applicable |
| Vapor Density: | Not applicable |
| Melting Point: | Not applicable |
| Evaporation Rate: | <1 (Butyl Acetate = 1.0) |
| Solubility in Water: | 100% |

| | |
|---|---|
| pH: | 8.0 |
| Specific Gravity: | 1.03 @ 25°C |
| Odor: | Mild, pleasant |
| Form: | Liquid |
| Color: | Straw yellow |

## Section 10. STABILITY AND REACTIVITY

**Chemical Stability**
Stable.

**Incompatibility, Materials to Avoid**
Avoid use of product on burning metals, electrically-energized equipment and contact with water reactive materials.

**Polymerization**
Will not occur.

## Section 11. TOXICOLOGICAL INFORMATION

**Mammalian Toxicity**

**Ingestion**
This material was not toxic when administered to Wistar Albino rats at an acute oral dose of 5g/kg body weight.

**Eye**
Animal testing indicates this material is a primary eye irritant when tested undiluted on New Zealand Albino Rabbits.

**Skin**
Animal testing indicates this material is not a primary skin irritant when tested undiluted on New Zealand Albino Rabbits.

**Inhalation**
No data available at this time.

**Carcinogenic, Developmental, Reproductive, Mutagenic Effects**
No data available on this material.

Section 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information Aquatic Toxicity**
96 hr. Flow Through $LC_{50}$ for Fathead Minnows (pimephales promelas) is reported to be greater than 1000 ppm.

Environmental Fate

| | | |
|---|---|---|
| $BOD_5$ | Concentrate | 239,000 mg/kg |
| $BOD_5$ | 3% solution | 8,750 mg/kg |
| COD | Concentrate | 400,000 mg/kg |

## Section 13. DISPOSAL CONSIDERATIONS

Aer-O-Lite 3%, as sold, is not a RCRA-listed waste or hazardous waste as characterized by 40 CFR 261. However, State and local requirements for waste disposal may be more restrictive or otherwise different from Federal regulations. Therefore, applicable local and state regulatory agencies should be contacted regarding disposal of waste foam concentrate or foam/foam solution.

**Concentrate**
Do not discharge into biological sewer treatment systems without prior approval. Specific concerns are high BOD load and foaming tendency. Low dosage flow rate or antifoaming agents acceptable to the treatment plant may be helpful. Do not flush to waterways. Disposal should be made in accordance with federal, state and local regulations.

**Foam/Foam Solution**
Aer-O-Lite 3% foam solution can be treated by waste water treatment facilities. Discharge into biological sewer treatment facilities may be done with prior approval. Specific concerns are high BOD load. Dilution will reduce BOD and COD factors proportionately. Low dosage flow rate or antifoaming agents acceptable to the treatment plant may be helpful. Do not flush to waterways. Disposal should be made in accordance with federal, state and local regulations.

NOTE: As a service to our customers, National Foam has approvals in place with disposal facilities throughout the U.S. for waste water treatment and solidification and landfill of our foam liquid concentrates and foam solutions. If required, National Foam, Inc. can also provide information on the disposal of drums used for shipping our concentrates. Please contact National Foam's Risk Management Administrator at (610) 363-1400 for additional information.

## Section 14. TRANSPORTATION INFORMATION

**Shipping Information**
Proper Shipping Name: Fire Extinguisher Charges or Compounds N.O.I., Class 60
National Motor Freight Code: 69160, Sub 0
Hazard Class: None
UN Number: None

## Section 15. REGULATORY INFORMATION

**U.S. Federal Regulations**

**Toxic Substances Control Act (TSCA)**
All components of this product are listed in the TSCA inventory.

**Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III**

**Section 302/304**
There are no components of this material with known CAS numbers which are on the Extremely Hazardous Substances (EHS) list.

**Section 311 & 312**
Based on available information, this material contains the following components which are classified as the following health and/or physical hazards according to Section 311 & 312:
(2-Methoxymethylethoxy) Propanol 34590-94-8 (Flammability)

**Section 313**
This material does not contain any chemical components subject to Section 313 reporting requirements.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)**
This material does not contain any components subject to the reporting requirements of CERCLA.

**OTHER REGULATORY INFORMATION**
None.

**STATE REGULATIONS**

**PENNSYLVANIA RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST**

**PA Hazardous Substances present at levels greater than 1%:**
1, 2 Propanediol 57-55-6
(2-Methoxymethylethoxy) Propanol 34590-94-8

## Section 16. OTHER INFORMATION

### NFPA Rating

Health 0
Flammability 0
Reactivity 0

### ADDITIONAL INFORMATION

**Revision Summary**
2/5/99 Added MSDS number, updated Sections 1,3,4,6,7,9,11,12,13,15
10/2/96 Updated Section 12 - Environmental Fate.
5/3/96 Revised to ANSI format.
08/10/00 Revised Section 1 and 2

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For further information, see National Foam Product Data Sheet for Aer-O-Lite 3%.

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