


National Foam, Inc.
**Material Safety
Data Sheet**
Universal Plus 3%/6%

Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

Section 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION
Material Identification

Product: Universal Plus 3% / 6%

Synonyms: Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

CAS No: Mixture - No single CAS # applicable

Company Identification

 Manufacturer National Foam, Inc.
 150 Gordon Drive
 P.O. Box 270
 Exton, PA 19341-1350

Emergency Phone Number (610) 363-1400 (U.S.A.)


Section 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS Number</u>
Water	7732-18-5
(2-Methoxymethylethoxy) Propanol	34590-94-8
Sodium Decyl Sulfate	142-87-0
Alkyl Polyglycoside	132778-08-6
Fluoroalkyl Surfactant	34455-29-3

Section 3. HAZARDS IDENTIFICATION
Potential Health Effects
Inhalation

No data available.

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

No significant signs indicative of any adverse health effect are expected to occur as a result of ingestion.

Acute oral toxicity is >5.0 g/kg body weight in Wistar Albino rats.

Additional Health Effects

Existing eye or skin sensitivity may be aggravated by exposure.

Carcinogenicity Information

No data available.

Universal Plus 3%/6%**Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)****Section 4. FIRST AID MEASURES****Inhalation**

If inhaled, remove victim to fresh air. Give oxygen or artificial respiration as needed. Obtain emergency medical attention.

Skin Contact

In case of skin contact, immediately flush skin with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If irritation occurs, obtain medical attention. Wash contaminated clothing before re-use.

Eye Contact

In case of eye contact, immediately flush eyes with copious amounts of water for 15-30 minutes. Retract eyelids often. Contact a physician.

Ingestion

If swallowed, give victim plenty of water to drink. Do not induce vomiting. Call a physician or poison control center. Never administer anything by mouth to an unconscious person.

Section 5. FIRE FIGHTING MEASURES**Flammable Properties**

Flash Point N/A

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. Collect spilled concentrate with absorbent material. Flush area with water until it no longer foams. Exercise caution, surfaces may be slippery. Prevent discharge of concentrate to waterways or into biological sewer treatment systems. 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 or into biological sewer treatment systems. Disposal should be made in accordance with federal, state and local regulations.

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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 within 35°F (2°C) - 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

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Section 9. PHYSICAL AND CHEMICAL PROPERTIES**Physical Data**

Boiling Point Not applicable
Vapor Pressure Not applicable
Vapor Density 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 1.022 @ 25°C
Odor Mild, pleasant
Form Viscous 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 White Rabbits.

Skin

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

Inhalation

No data available at this time.

Carcinogenic, Developmental, Reproductive, Mutagenic Effects

No data available on this material.



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Section 12. ECOLOGICAL INFORMATION

Ecotoxicological Information Aquatic Toxicity

96 hr. Flow Through LC₅₀ for Fathead Minnows (pimephales promelas) is reported to be greater than 1000 ppm

Environmental Fate

BOD₅ 68,800 mg/kg
COD 190,000 mg/kg

Section 13. DISPOSAL CONSIDERATIONS

Water Disposal

Do not flush to waterways or into biological sewer treatment systems. Disposal should be made in accordance with federal, state and local regulations.

Section 14. TRANSPORTATION INFORMATION

Shipping Information

Proper Shipping Name Fire Extinguishers or Compounds N.O.I.B.N.
Hazard Class None
UN No. 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 1988 (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.

Universal Plus 3%/6%**Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)****Section 15. REGULATORY INFORMATION (continued)****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%:

(2-Methoxymethylethoxy) Propanol 34590-94-8

Section 16. OTHER INFORMATION**NFPA Rating**

Health 0

Flammability 0

Reactivity 0

ADDITIONAL INFORMATION**Revision Summary**

8/21/95 Revised to ANSI format.

For further information, see National Foam Technical Data Sheet for Universal Plus 3% / 6%.

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