National Foam

MATERIAL SAFETY DATA SHEET #NMS130

Aer-O-Foam XLX-3 3%

FLUOROPROTEIN FOAM LIQUID CONCENTRATE

Section 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Product: Aer-O-Foam XLX-3 3%
Synonyms: Fluoroprotein Foam
CAS No: Mixture – No single CAS # applicable

Company Identification

Manufacturer:
National Foam, Inc.
180 Sheree Boulevard, Suite 3900
Exton, PA 19341
Emergency Phone Number (Red Alert): (610) 363-1400 (U.S.A.)
Fax Number: (610) 524-9073
www.nationalfoam.com

Section 2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	% Weight
Water	7732-18-5	57-70%
Protein Hydrolysate	69430-36-0	25-30%
Ethylene Glycol: 1,2 Ethanediol	107-21-1	2-5%
Hexylene Glycol: 2-Methyl-2,4 Pentanediol	107-41-5	2-5%
Ferrous Sulfate	7720-78-7	1-2%
Zinc Chloride	7646-85-7	0.1-0.5%

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
No significant signs of adverse health effects are expected to occur as a result of skin contact.

Eye Contact
No significant signs of adverse health effects are expected to occur as a result of eye contact.

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 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. Contact a physician if irritation persists.

Ingestion
If swallowed, give victim plenty of milk or water to drink. Do not induce vomiting. Never administer anything by mouth to an unconscious person. Seek medical attention.

Section 5. FIRE FIGHTING MEASURES

Flammable Properties
Flash Point – >200°F

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 35°F (2°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	**PEL (OSHA)**	**TLV (ACGIH)**
Ethylene Glycol (107-21-1)	50 ppm	50 pp
Hexylene Glycol (107-41-5)	25 ppm	25 ppm
Ferrous Sulfate (7720-78-7)	1.0 mg/m^3	1.0 mg/m^3
Zinc Chloride (7646-85-7)	1.0 mg/m^3	1.0 mg/m^3

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:	7.3

Specific Gravity:	1.11@ 15°C
Freezing Point:	19°F (-7°C)
Odor:	Organic
Form:	Liquid
Color:	Dark Brown

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

This product has not been tested as a whole for acute oral toxicity, primary skin irritation, or primary eye irritation.

Section 12. ECOLOGICAL INFORMATION

Ecotoxicological Information Aquatic Toxicity
No data available

Environmental Fate

BOD_5	Concentrate	118,000 mg/l
COD	Concentrate	491,000 mg/l

Section 13. DISPOSAL CONSIDERATIONS

Concentrate

Do not discharge into biological sewer treatment systems without prior approval. Specific concerns may be high BOD load and foaming tendency. 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.

Foam/Foam Solution

Aer-O-Foam XLX-3 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/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 wastewater treatment 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 70
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:

Ethylene Glycol	107-21-1	Health – Immediate and Chronic
Hexylene Glycol	107-41-5	Health – Immediate
Zinc Chloride	7646-85-7	Health - Immediate

Section 313
Based on the available information, this material contains the following components which are subject to Section 313 reporting requirements.

Ethylene Glycol	107-21-1
Zinc Chloride	7646-85-7

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)
This material contains the following components which are subject to the reporting requirements of CERCLA.

Ethylene Glycol	107-21-1	6% by weight
Ferrous Sulfate	7720-78-7	less than 2% by weight
Zinc Chloride	7646-85-7	less than 1% by weight

OTHER REGULATORY INFORMATION
Canadian Environmental Protection Act (CEPA). All ingredients are listed on the DSL (Domestic Substance List).

STATE REGULATIONS

PENNSYLVANIA RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST

PA Hazardous Substances present at levels greater than 1%:

Ethylene Glycol	107-21-1
Hexylene Glycol	107-41-5
Ferrous Sulfate	7720-78-7

Section 16. OTHER INFORMATION

NFPA Rating

Health 0
Flammability 0
Reactivity 0

WHMIS Rating

D2B

ADDITIONAL INFORMATION

Preparation Date/Revision Number.....10/23/13

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October 23, 2013