



MATERIAL SAFETY DATA SHEET #NMS720

---

## High Expansion 1½%

---

### Section 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### Material Identification

Product: High Expansion 1 ½ %  
Synonyms: Synthetic Detergent  
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 Number: (610) 524-9073  
[www.nationalfoam.com](http://www.nationalfoam.com)  
[www.Kidde-Fire.com](http://www.Kidde-Fire.com)

---

### Section 2. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Components</b>	<b>CAS Number</b>
Proprietary mixture of synthetic detergents	No single CAS # applicable
2-Butoxyethanol	111-76-2
Water	7732-18-5

---

### **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**

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, immediately flush skin with copious amounts of water for at least 15 minutes. Launder clothing before re-use. If irritation occurs, obtain medical attention.

##### **Eye Contact**

In case of eye contact, immediately flush eyes with copious amounts of water for 15-30 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 – 172°F (Cleveland Open Cup)

### **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

2-Butoxyethanol                      111-76-2

##### PEL(OSHA)

25 ppm TWA (skin)

##### TLV (ACGIH)

100 mg/m<sup>3</sup>

---

## 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:	6.9
Specific Gravity:	0.98 @ 25°C
Odor:	Mild, pleasant
Form:	Liquid
Color:	Pale 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**

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

---

## **Section 12. ECOLOGICAL INFORMATION**

### **Ecotoxicological Information Aquatic Toxicity**

No data available.

### **Environmental Fate**

BOD<sub>5</sub> 722,000 mg/l

COD 1,320,000 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**

High Expansion 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 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-Butoxyethanol	111-76-2	Health – Immediate and Delayed, Fire
-----------------	----------	--------------------------------------

### **Section 313**

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

2-Butoxyethanol                      111-76-2

### **COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)**

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

2-Butoxyethanol                      111-76-2

### **OTHER REGULATORY INFORMATION**

None

### **STATE REGULATIONS**

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

**PA Hazardous Substances present at levels greater than 1%:**

2-Butoxyethanol                      111-76-2

---

## Section 16. OTHER INFORMATION

### NFPA Rating

Health 1  
Flammability 1  
Reactivity 0

### ADDITIONAL INFORMATION

#### Revision Summary

9/23/99        Added MSDS number, updated Sections 6,8, 13, 14, and 15  
  
10/2/96        Revised to ANSI format  
08/10/00       Revised Section 1

---

**The information contained herein is furnished without warranty either expressed or implied. This data sheet is not a part of any contract of sale. The information contained herein is believed to be correct or is obtained from sources believed to be generally reliable. However, it is the responsibility of the user of these materials to investigate, understand and comply with federal, state and local guidelines and procedures for safe handling and use of these materials. National Foam, Inc. shall not be liable for any loss or damage arising directly or indirectly from the use of this product and National Foam, Inc. assumes no obligation or liabilities for reliance on the information contained herein or omissions herefrom.**

August 10, 2000