SAFETY DATA SHEET

Revision Date 14-March-2016 **Version** 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Foremost 4569-ES Foam-N-Kleen Aerosol

Product Code 4569-ES

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Aerosol cleaner.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Flammable Aerosols	Category 1
Skin Irritation	Category 2
Eye Irritation	Category 2A

Signal Word

Danger

Hazard Statements

Extremely flammable aerosol
Causes skin irritation
Causes serious eye irritation

Appearance White Foam **Physical State** Liquid / Foam **Odor** Pleasant

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
Wear eye protection/face protection.
Do not spray into and open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Wash thoroughly after handling.
Wear protective gloves.

Precautionary Statements – Response

If ON SKIN: Immediately remove contaminated clothing and wash before reuse. Wash with plenty of soap and water.
IF SKIN IRRITATION OCCURS: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

Protect from sunlight.
Do not expose to temperatures exceeding 50°C / 122°F.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with all local, regional, national, and international regulations.

Hazards Not Otherwise Classified (HNOC)

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Disodium Metasilicate	6834-92-0	Proprietary
Butane	106-97-8	Proprietary
Propane	74-98-6	Proprietary
Polyethylene Glycol Octylphenyl Ether	9036-19-5	Proprietary
Trisodium Phosphate	10101-89-0	Proprietary
2-Butoxyethanol	111-76-2	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES

First Aid Measures

General Advice

Immediate medical attention is required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Severe eye irritant. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritant. May cause redness and pain.

Eye Contact

Call a physician or Poison Control Center immediately.

Skin Contact

Call a physician or Poison Control Center immediately.

Inhalation

The inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician or Poison Control Center immediately. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Fog, dry chemical, or carbon dioxide.

Unsuitable Extinguishing Media Do not use water jet as an extinguisher, as this will spread the fire.

Specific Hazards Arising from the Chemical
Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Protective Equipment and Precautions for Firefighters
Firefighters must use standard protective equipment, including flame-retardant coat and helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build-up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Use standard firefighting procedures and consider the hazards of other involved materials.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Emergency Procedure	Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of SDS.

Methods and Material for Containment and Cleaning Up

Methods for Containment	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. If possible, turn leaking containers to that gas escapes rather than liquid. Isolate area until gas has dispersed.
Methods for Cleaning Up	Use a non-combustible material like vermiculite, sand, or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see Section 13 of this SDS. Do not contaminate water. Avoid discharge into drains, water courses, or onto the ground.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling	Will ignite if exposed to intensive heat or open air. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not reuse any empty containers. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not get this material on clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Level 1 Aerosol.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate, or crush. Do not handle or store near an open flame, heat, or other sources of ignition. This material can accumulate static charge, which may cause spark and become an ignition source. Refrigeration recommended. Store away from incompatible materials (see below).

Incompatible Materials Nitrates, Oxygen, Fluorine, Chlorine.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3	TWA: 24 mg/m^3 TWA: 5 ppm
Butane 106-97-8	STEL: 1,000 ppm		TWA: 800 ppm TWA: 1,900 mg/m^3
Propane 74-98-6		TWA: 1,000 ppm TWA: 1,800 mg/m^3	TWA: 1,000 ppm TWA: 1,800 mg/m^3

Appropriate Engineering Controls

Engineering Controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear tight-fitting goggles or face shield. Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear chemical protective equipment that is specifically recommended by the manufacturer. Use of an impervious apron is recommended. It may provide little or no thermal protection.

Respiratory Protection If permissible levels are exceeded, use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

General Hygiene Considerations When using, do not eat, drink, or smoke. Do not get in eyes. Do not get this material in contact with skin. Avoid contact with skin. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wear appropriate thermal protective clothing, when necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid / Foam		
Appearance	White Foam	**Odor**	Pleasant
Color	White	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	Not determined	
Melting Point/Freezing Point	N/A	
Boiling Point/Boiling Range	212°F estimated	
Flash Point	-156.0°F propellant estimated	

Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	60 psig @ 70°F estimated	
Vapor Density	Not determined	
Specific Gravity	0.980	(1=Water)
Water Solubility	Insoluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity
This product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical Stability
Risk of ignition.

Possibility of Hazardous Reactions
Will not occur.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Exposure to air. Heat, flames, and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible Materials
Nitrates, Oxygen, Fluorine, Chlorine.

Hazardous Decomposition Products
No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact Causes serious eye irritation. Harmful in contact with eyes.

Skin Contact Causes skin irritation. Prolonged skin contact may cause temporary irritation.

Inhalation Prolonged inhalation may be harmful.

Ingestion Expected to be a low ingestion hazard.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxyethanol 111-76-2	= 1,200 mg/kg (Guinea Pig) = 530-2,800 mg/kg (Rat)	= 230 mL/kg (Guinea Pig) 24 h = 7.3 mL/kg (Rabbit) 4 d	= 400 ppm (Rabbit) 7 h = 450 ppm (Rat) 4 h
Butane 106-97-8			= 202,000 ppm (Mouse) 4 h = 276,000 ppm (Rat) 4 h
Disodium Metasilicate 6834-92-0	= 661.5-896.3 mg/kg (Mouse) = 600 mg/kg (Rat)	>5,000 mg/kg (Rat) 24 h	>2.06 mg/L (Rat) 4 h
Polyethylene Glycol Octylphenyl Ether 9036-19-5	= 4,190 mg/kg (Rat)		
Propane 74-98-6			= 1,237 mg/L (Mouse) 120 min = 1,355 mg/L (Rat) 4 h
Trisodium Phosphate 10101-89-0	= 7,400 mg/kg (Rat)		

Information on Physical, Chemical and Toxicological Effects

Symptoms Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Germ Cell Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive Toxicity This product is not expected to cause reproductive or developmental effects.

STOT - Single Exposure Not classified.

Chronic Toxicity Prolonged inhalation may be harmful. Prolonged or repeated exposure may cause lung injury.

Acute Toxicity Not available.

Aspiration Hazard Not likely, due to the form of the product.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components of this product are hazardous to aquatic life.

Product Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Product FM 4569-ES		13,176: 96 h Menidia beryllina mg/L LC50		

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Butoxyethanol 111-76-2		1,250: 96 h Menidia beryllina mg/L LC50		
Polyethylene Glycol Octylphenyl Ether 9036-19-5		7.2: 96 h Oncorhynchus mykiss mg/L LC50		

Persistence and Degradability
Data is not available on the degradability of this product.

Bioaccumulation
No data available.

Partition Coefficient *n*-Octanol / Water (log K_{ow})
2- Butoxyethanol 0.83
Butane 2.89
Propane 2.36

Mobility in Soil
No data available.

Other Adverse Effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate, or crush. Dispose of contents/container in accordance with all local, regional, national, and international regulations. Dispose in accordance with all applicable local regulations. The Hazardous Waste Code should be assigned in discussion between the user, the producer, and the waste disposal company.

Dispose of all waste from residues/unused product in accordance with all local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions).

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings, even after container is emptied. Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

IATA

UN/ID No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

IMDG

UN/ID No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
Packing Group	N/A

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

CAS	Chemical Name	Regulation List
74-98-6	Propane	SARA312, VOC, TSCA, ACGIH, OSHA, CAA
111-76-2	2-Butoxyethanol	SARA312, TSCA
106-97-8	Butane	SARA312, VOC, TSCA, ACGIH, CAA
10101-89-0	Trisodium Phosphate	SARA312, CERCLA, TSCA

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Butoxyethanol 111-76-2	X	X	X
Butane 106-97-8	X	X	X
Propane 74-98-6	X	X	X
Trisodium Phosphate 10101-89-0		X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	1	3	0	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	1	3	0	B

Revision Date	14-March-2016
Revision Note	New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet