



SAFETY DATA SHEET

Revision Date 10-July-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Foremost 4888-ES Bug-Off

UN/ID No UN1950
Product Code 4888-ES

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Insect Repellent

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
Gasses under pressure	Liquefied Gas
Skin sensitization	Category 1
Eye Irritation	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 3

Signal Word

DANGER

Hazard Statements

Keep out of reach of children.
Read label and SDS before use.
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May cause drowsiness or dizziness.
Causes serious eye irritation.
May cause an allergic skin reaction.



Appearance Clear, colorless mist**Physical State** Liquid**Odor** Pleasant**Precautionary Statements - Prevention**

Avoid breathing mist or spray.

Use only outdoors or in a well ventilated area.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container. Do not puncture or burn, even after use.

Contaminated work clothing must not be allowed to leave the workplace.

Avoid over-application of this product.

Do not spray directly onto the face; spray on hands first and then apply sparingly and avoid eyes.

After returning indoors wash treated skin with soap and water.

Precautionary Statements - Response

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Precautionary Statements - Storage

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

Store in a well-ventilated place.

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Other Hazards

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isobutane	75-28-5	Proprietary
Isopropanol	67-63-0	Proprietary
Propane	74-98-6	Proprietary
n-Octyl bicycloheptenedicarboximide	113-48-4	Proprietary
N,N-diethyl-m-toluamide	134-62-3	Proprietary
Di-n-propyl isocichomonate	136-45-8	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES**First Aid Measures****General Advice**

Extremely flammable. Contents under pressure. Keep away from heat and flame. Keep away from eyes. If exposed or concerned: Get medical advice/attention. Provide this SDS to medical personnel for treatment.

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
Skin Contact	Wash with plenty of soap and water after returning indoors. If skin irritation or rash occurs get medical attention. Take off contaminated clothing and wash it before reuse.
Inhalation	Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Call a poison center or a doctor if you feel unwell.
Ingestion	May be harmful if swallowed. Seek medical attention immediately. Do NOT induce vomiting.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, fog, or foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products:

Carbon dioxide, carbon monoxide

Specific firefighting methods:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes and inhalation of vapors.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Absorb liquid with sawdust, sand or industrial absorbent. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources.

Methods for Cleaning Up Disperse vapors with water spray. Prevent runoff from entering drains, sewers, streams or other bodies of water. Absorb spill with inert material. Absorb unrecoverable product. Transfer contaminated absorbent, soil, and other materials to containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling

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. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Avoid breathing mists. Use only in well-ventilated areas. Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep in properly labeled containers. Store locked up.

Incompatible Materials

Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isobutane	1000ppm		
Isopropanol	400ppm	400ppm	
Propane	1000ppm		

Appropriate Engineering Controls

Engineering Controls

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection

Goggles or face shield.

Skin and Body Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear protective Neoprene™ gloves, Rubber gloves.

Respiratory Protection

Not required under typical use conditions. When respiratory protection is required use an organic vapor cartridge. A respiratory program that meets OSHA's 29CFR 1910.34 and ANSI Z88.2 requirements must be followed.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands after use and wash contaminated clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid / aerosol	Odor	Pleasant
Appearance	Clear mist	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not available	
Flash Point	50°F	
Evaporation Rate	>1	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	9.5%	
Lower Flammability Limit	1.9%	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	0.9	(1=Water)
Water Solubility	Partially soluble 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

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Acids, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact	Causes serious eye irritation. Symptoms include stinging, tearing, and redness.
Skin Contact	No irritation expected. May cause skin reactions in rare cases, resulting in redness and drying of the skin.
Inhalation	High vapor/ aerosol concentrations (>1000ppm) are irritating to the eyes and respiratory tract. May cause nose, throat, and respiratory tract irritation, coughing and headache.
Ingestion	Expected to be a low ingestion hazard. May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	= 5800 mg/kg (Rat)	-	-
Butane 106-97-8	= 1,658 mg/kg (Rat)	-	= 1,355 mg/L (Rat) 2 h
Propane 74-98-6	-	-	= 1,237 mg/L (Mouse) 120 min = 1,355 mg/L (Rat) 4 h

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Germ Cell Mutagenicity	None.
Carcinogenicity	None.
STOT - Single Exposure	May cause drowsiness or dizziness.
Chronic Toxicity	May cause skin sensitization. Overexposure to this material through inhalation may cause central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).
Aspiration Hazard	Not likely.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
DEET		Rainbow Trout – 97mg/l, 96 h		Daphnia – 75 ppm, 48 h

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not puncture, incinerate, or crush.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not puncture, incinerate, or crush.

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

If identified components of this product are **CERCLA** hazardous substances and/or listed under **Sections 302, 304, or 313 of Title III** of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (also known as EPCRA, the Emergency Planning and Community Right-to-know Act), or under **California Proposition 65** (Safe Drinking Water and Toxic Enforcement Act), they are listed above in Section 15 of this SDS.

If identified components of this product are listed under Section 313, this product contains toxic chemicals subject to the reporting requirements of Section 313. This information must be included in all SDS that are copied and distributed for this material.

Title III Section 311/312: Hazardous Categories – 40 CFR 370.2:

Acute (X) Chronic (X) Fire (X) Reactive () Not Applicable ()

T.S.C.A. Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

RCRA Status: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If the product becomes hazardous waste it would be assigned RCRA code(s):

D001

FIFRA information: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to labeling information under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word: **WARNING.** Hazard statement: Causes substantial but temporary eye injury. Harmful if swallowed.

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 1	Flammability 4	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 1	Flammability 4	Physical Hazards 0	Personal Protection A

Revision Date 10-July-2015
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