

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name BioStream Foamable HE

CAS # Mixture

Product use Natural Bacterial inoculant and Odor remover

Manufacturer NPD Products Ltd.
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2. Hazards Identification

Emergency overview

WARNING EYE AND SKIN IRRITANT.

Potential short term health effects

Routes of exposure

Eye, Skin contact, Inhalation, Ingestion.

Eyes Causes irritation, redness and tearing.

Skin May cause irritation.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Blood. Eyes. Liver. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

Ingredient(s)

	CAS #	Percent
Surfactant Blend	mixture	90%
Multi-Bacillus spore blend	mixture	
Sodium lauryl ether sulfate	9004-82-4	0.5 - 1
Alcohols C12-14 ethoxylated	68439-50-9	0.1 - 0.5
Ethanol	64-17-5	0.1 - 0.5
Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	0.1 - 0.5
Sodium citrate	6132-04-3	0.1 - 0.5
Zinc diricinoleate	13040-19-2	0.1 - 0.5
Alcohols, C6-12, ethoxylated	68439-45-2	0.05 - 0.15

4. First Aid Measures

First aid procedures

Eye contact

Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media

Dry chemical. Carbon dioxide. Alcohol foam.

Unsuitable extinguishing media Not available

Protection of firefighters

Specific hazards arising from the chemical

Not available

Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products May include and are not limited to: Oxides of carbon.

Explosion data

Sensitivity to mechanical impact Not available

Sensitivity to static discharge Not available

6. Accidental Release Measures as a concentrate

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods for containment Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling Use good industrial hygiene practices in handling this material.

When using do not eat or drink.

Wash hands before breaks and immediately after handling the product.

Storage Keep out of reach of children.

Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Engineering controls General ventilation normally adequate.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance aqueous solution

Color Opaque Yellow

Form Liquid

Odor Mild Detergent

Odor threshold Not available

Physical state Liquid

pH 8 - 9

Melting point Not available

Freezing point 30.20 °F (-1 °C)

Boiling point 213.80 °F (101 °C)

Pour point Not available

Evaporation rate Not available

Flash point Not available

Auto-ignition temperature Not available

**Flammability limits in air, lower, %
by volume** Not available

**Flammability limits in air, upper, %
by volume** Not available

Vapor density Not available

Specific gravity Not available

Relative density 1.01 G/mL

Octanol/water coefficient Not available

Percent volatile Not available

10. Stability and Reactivity

Reactivity This product may react with strong oxidizing agents.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Chemical stability Stable under recommended storage conditions.

Conditions to avoid Do not mix with other chemicals.

Strong acids or bases may inactivate bacterial mixture.

Incompatible materials Oxidizers. Acids. Caustics.

Hazardous decomposition products May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)

Alcohols C12-14 ethoxylated

LC50

Not available

Alcohols, C6-12, ethoxylated Not available Ethanol 31623 ppm rat Glucopyranose, oligomeric, decyl octyl glycosides Not available Sodium citrate Not available Sodium lauryl ether sulfate Not available Zinc diricinoleate Not available

Component analysis - Oral LD50

Ingredient(s)

Alcohols C12-14 ethoxylated

LD50

9800 mg/kg rat

Alcohols, C6-12, ethoxylated 5050 mg/kg rat

Ethanol 3450 mg/kg mouse; 7060 mg/kg rat

Glucopyranose, oligomeric, decyl octyl glycosides 5000 mg/kg rat Sodium citrate Not available Sodium lauryl ether sulfate 1600 mg/kg rat Zinc diricinoleate Not available

Effects of acute exposure

Eye Causes irritation, redness and tearing.

Skin May cause irritation.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion May cause stomach distress, nausea or vomiting.

Sensitization The finished product is not expected to have chronic health effects.

Chronic effects The finished product is not expected to have chronic health effects.

Carcinogenicity The finished product is not expected to have chronic health effects.

ACGIH - Threshold Limit Values - Carcinogens

Ethanol 64-17-5 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC - Group 1 (Carcinogenic to Humans)

Ethanol 64-17-5 Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [in preparation] (in alcoholic beverages)

Mutagenicity The finished product is not expected to have chronic health effects.

Reproductive effects The finished product is not expected to have chronic health effects.

Teratogenicity The finished product is not expected to have chronic health effects.

Name of Toxicologically Synergistic Not available

Products

12. Ecological Information

Ecotoxicity

No data available.

Environmental Fate

As a concentrated surfactant this product will have an adverse effect on aquatic environments at high levels. Under normal conditions it is not expected to have any effect on aquatic or terrestrial environments.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations.

Waste from residues / unused products

Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List Ethanol 64-17-5 0.01 %

WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

16. Other Information

Disclaimer Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by lab

Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

LEGEND HMIS/NFPA

Health 1

Flammability 0

Physical Hazard 0

Personal Protection B