

BIOFOAM

SECTION 1. IDENTIFICATION

Product Identifier BIOFOAM
Other Means of Identification Code: ECJ-807
Recommended Use Cleaning product.
Restrictions on Use For food plant and industrial use only.
Manufacturer/Supplier Identifier Epsilon Chemicals Ltd., 1926-94 Street N.W., Edmonton, Alberta, T6N1J3, (780) 438-3040
Emergency Phone No. CANUTEC, (613) 996-6666, 24/7

SECTION 2. HAZARD IDENTIFICATION

Classification

Oxidizing liquid - Category 3; Corrosive to metals - Category 1; Skin corrosion - Category 1; Serious eye damage - Category 1

Label Elements



Signal Word:
Danger

Hazard Statement(s):

H272 May intensify fire; oxidizer.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary Statement(s):

Prevention:

P210 Keep away from heat.
P220 Keep away from clothing and other combustible materials.
P260 Do not breathe dusts or mists.
P264 Wash hands and skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Drink a glass of water.
P315 Get immediate medical advice/attention.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314 Get medical advice/attention if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention.

Storage:

Store locked up in a cool, well-ventilated place away from possible contaminants.

Keep container closed when not in use.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Acetic acid	64-19-7	7-13		
Hydrogen peroxide	7722-84-1	7-13		
Peroxyacetic acid	79-21-0	1-5		
Alkyl Benzenesulfonic Acid	68584-22-5	1-5		
Alcohol ethoxylate	68991-48-0	1-5		

Notes

Concentrations are expressed in % weight/weight.

Actual concentrations are withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Get medical attention.

Ingestion

Rinse mouth with water. Drink a glass of water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get immediate medical attention.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: inhalation of vapours or mists may be irritating to the respiratory system.

If on skin: will cause skin irritation. May cause burns to the skin. Prolonged or repeated exposure to dilutions may cause drying, defatting and dermatitis.

If swallowed: may cause nausea, vomiting and diarrhea.

If in eyes: causes moderate to severe irritation, reddening and swelling of tissue around the eyes. May cause burns depending upon the duration of contact.

Product Identifier: BIOFOAM - Ver. 1

Date of Preparation: May 15, 2019

Date of Last Revision: May 15, 2019

Immediate Medical Attention and Special Treatment

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Mild oxidizer.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive sulfur oxides; oxygen.

Special Protective Equipment and Precautions for Fire-fighters

Oxidizer. Prevent contact with flammable and combustible materials.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Keep out unnecessary and unprotected personnel. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Use appropriate certified respirators when facing concentrations above exposure limit. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Dike spilled product to prevent runoff. Contain and soak up spill with absorbent that does not react with spilled product. Do NOT use combustible materials such as sawdust. Place used absorbent into suitable, covered, labelled containers for disposal.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Do not get in eyes, on skin or on clothing. Do not swallow. Wear personal protective equipment to avoid direct contact with this chemical.

Only use where there is adequate ventilation. Keep away from clothing and other combustible materials. Prevent heating.

Keep containers tightly closed when not in use or empty. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system).

Conditions for Safe Storage

Store in an area that is: cool, dry, temperature-controlled, well-ventilated, out of direct sunlight and away from heat and ignition sources, clear of combustible and flammable materials (e.g. old rags, cardboard), separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container.

Product Identifier: BIOFOAM - Ver. 1

Date of Preparation: May 15, 2019

Date of Last Revision: May 15, 2019

Page 03 of 07

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL [C]	TWA	Ceiling
Acetic acid	10 ppm	15 ppm	10 ppm	
Hydrogen peroxide	1 ppm A3		1 ppm	
Peroxyacetic acid		0.4 ppm A4	Not established	

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value.

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. C = Ceiling limit.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Not normally required in well-ventilated areas. Use appropriate certified respirators when facing concentrations above the exposure limit.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear colourless liquid.
Odour	Acidic
Odour Threshold	Not available
pH	1.10
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	~ 1.059
Solubility	Soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid

Product Identifier: BIOFOAM - Ver. 1

Date of Preparation: May 15, 2019

Date of Last Revision: May 15, 2019

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Incompatible materials. Contact with combustible materials. Heat.

Incompatible Materials

Strong reducing agents (e.g. hydrides), organic materials.

Aluminum, zinc.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive sulfur oxides; oxygen (a strong oxidizer).

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Acetic acid	11.4 mg/L (rat) (4-hour exposure)	3530 mg/kg (rat)	1060 mg/kg (rabbit)
Hydrogen peroxide	2 mg/L (rat) (4-hour exposure)	1193 mg/kg (rat)	Not available
Peroxyacetic acid	0.204 mg/L (rat) (4-hour exposure)	1540 mg/kg (rat)	1275 mg/kg (rabbit)
Alkyl Benzenesulfonic Acid	Not available	775 mg/kg (rat)	2000 mg/kg (rabbit)
Alcohol ethoxylate	Not available	> 2000 mg/kg (rat)	Not available

Skin Corrosion/Irritation

Will cause skin irritation. May cause burns to the skin. Prolonged or repeated exposure to dilutions may cause drying, defatting and dermatitis.

Serious Eye Damage/Irritation

Causes moderate to severe irritation, reddening and swelling of tissue around the eyes. May cause burns depending upon the duration of contact.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Inhalation of vapours or mists may be irritating to the respiratory system.

Ingestion

May cause vomiting, nausea, diarrhea.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Acetic acid	Not Listed	Not designated	Not Listed	Not Listed
Hydrogen peroxide	Group 3	A3	Not Listed	Not Listed
Peroxyacetic acid	Not Listed	A4	Not Listed	Not Listed

Product Identifier: BIOFOAM - Ver. 1

Date of Preparation: May 15, 2019

Date of Last Revision: May 15, 2019

Alkyl Benzenesulfonic Acid	Not Listed	Not designated	Not Listed	Not Listed
Alcohol ethoxylate	Not Listed	Not designated	Not Listed	Not Listed

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 3 = Not classifiable as to its carcinogenicity to humans.

ACGIH® = American Conference of Governmental Industrial Hygienists. A3 = Animal carcinogen.

NTP = National Toxicology Program.

OSHA = US Occupational Safety and Health Administration.

No information was located for: Aspiration Hazard, STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No information was located.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Product should not be allowed to enter drains, water courses or the soil. This product and its container should be disposed of in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	3149	Hydrogen peroxide and peroxyacetic acid mixture	5.1 (8)	II
US DOT	3149	Hydrogen peroxide and peroxyacetic acid mixture	5.1 (8)	II

Special Precautions Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

Product Identifier: BIOFOAM - Ver. 1

Date of Preparation: May 15, 2019

Date of Last Revision: May 15, 2019

SECTION 16. OTHER INFORMATION

SDS Prepared By	Technical Service Department, Epsilon Chemicals
Phone No.	(780) 438-3040
Date of Preparation	May 15, 2019
Date of Last Revision	May 15, 2019
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).
Disclaimer	The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.