

SECTION 1: PRODUCT AND COMPANY INFORMATION

Manufacturer	Biofeed Solutions, Inc., PO Box 3434, Glendale, AZ 85311		
Telephone	623-930-7510	Fax	623-930-8598
Product Name(s)	SURFACT	Product ID #	Not Applicable
Chemical Family	Wetting Agent and Surfactant	CAS Number	Mixture
Emergency Contact / Number	623-930-7510		

SECTION 2: HAZARD IDENTIFICATION**2.1 Classification of the substance or mixture****Classification according to 29 CFR 1910.1200**

Eye irritation Category 1 H318

2.2 Label elementsSignal word: DANGER
Hazard Statements: H318 – Causes serious eye damage.

Precautionary Statements:

(Prevention): P102 – Keep out of reach of children.
P103 – Read label before use.
P233 – Keep container tightly closed.
P234 – Keep only in original container.
P260 – Do not breathe dust / fume / gas / mist / vapors / spray.
P264 – Wash thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P280 – Wear protective gloves / protective clothing / eye protection / face protection.

Precautionary Statement:

P305+P351+P338 – IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P302+P352 – IF ON SKIN: Wash with plenty of water for 15 to 20 minutes
P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 – Do not induce vomiting.
P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary Statement:

(Storage): P401+P404 – Store in a cool, dry place. Store in a closed container.

Precautionary Statement:

(Disposal): P501 – Dispose of contents in container at an approved waste disposal facility in accordance with all local/regional/national regulations.

2.3 Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures**

Chemical Name:	CAS No.	Classification	Concentration
Ammonium Lauryl Polyethylene Glycol	2235-54-3	Surfactant	45% – 46%
TSCA:TSCA 8(b) inventory: Ammonium Lauryl Sulfate	—	—	34% – 54%
Organic matter and other plant beneficial materials	—	—	—

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

- General Advice:** Get medical attention if symptoms occur.
- Eye contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

- Symptoms:** Causes serious eye damage. May cause skin irritation. May be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

4.3 Immediate Medical Attention and Special Treatment

- Treatment:** Treat symptomatically. Symptoms may be delayed.
FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL A POISON CONTROL CENTER OR DOCTOR IF IRRITATION PERSISTS. CALL 1-623-930-7510 FOR ADDITIONAL ASSISTANCE.
 Take container, label or product name with you when seeking medical attention.
NOTES TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- Suitable Extinguishing Media:** Use water fog, alcohol foam, dry chemical, or carbon dioxide extinguishing media.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Specific Hazards During Firefighting:** None known.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

- Special Protective Equipment for Firefighters:** Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use alcohol-type or universal-type foam on larger fires. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- Personal Precautions:** Avoid inhalation of vapors, fumes, and spray mist and prolonged or repeated contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

- Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers, or watercourses.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- Methods for Clean-Up:**
- Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.
- Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination. Never return spills to original containers for re-use.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling :

Avoid inhalation of vapors / spray mist or fumes and contact with eyes, skin and clothing. Do not breathe the mist or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking. Eye wash and safety shower on site are recommended.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers:

Store in a cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Do not contaminate water, food or feed by storage or disposal.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS

ACGIH TLVs TWA

No data available

OSHA PELs TWA

No data available

Biological limit values

ACGIH Biological Exposure Indices

No data

8.2 EXPOSURE CONTROLS

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limit and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures

Skin Protection:

Eye / Face Protection: Chemical goggles or face shield are recommended.

Respiratory Protection:

Wear protective clothing. Wear protective gloves.

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear respiratory protection during operations where spraying or misting occurs. Wear air supplied respiratory protection. In the U.S.A., if respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Liquid	Flash Point	>93 °C (>200 °F) - PMCC
Specific Gravity (Water=1)	1.0209 g/ml	Upper Flammability Limits	Not Applicable
Evaporation Rate	Less than 1	Lower Flammability Limits	Not Applicable
pH	5.0 – 7.0 (5% solution)	Auto-ignition Temperature	Not Applicable
Solubility in Water	No data available	Decomposition Temperature	Not Determined
Odor	Characteristic	Vapor Pressure	Not Determined
Odor Threshold	Not Determined	Vapor Density (Air=1)	Not Determined
Melting/Freezing Point	48 °F / 8°C	Partition Coefficient (n-octanol/water)	Not Determined
Boiling Range	No data available	Viscosity (@ 41 °C)	1,737 mPa.s @ 77 °F (25 °C)
Initial Boiling Point	No data available	Critical Temperature	Not Determined

Note: Physical and chemical properties are provided for safety, health and environmental considerations and do not fully represent product specifications. Those should be requested separately.

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

10.4 CONDITIONS TO AVOID

Keep away from heat and sources of ignition. Keep away from flames and sparks

10.5 INCOMPATIBLE MATERIALS

Strong acids. Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact, inhalation.

LC₅₀ (rat):	No data available
LD₅₀ Oral (rat):	> 2,000 mg/kg
LD₅₀ Dermal (rabbit):	No data available
Skin Irritation (rabbit):	Slight irritant
Eye Irritation (rabbit):	Causes serious eye damage.
Specific Target Organ Toxicity:	Eyes
Aspiration:	No data available
Skin Sensitization (guinea pig):	No data available
Carcinogenicity:	No data available
Germ Cell Mutagenicity:	No data available
Interactive Effects:	None known

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

Ecotoxicological Data No data available

Drift or runoff may adversely affect non-target plants.
Do not apply directly to water.
Do not contaminate water when disposing of equipment wash water.
Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available

12.4 MOBILITY IN SOIL

No data available

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

Do not contaminate water, food or feed by storage or disposal. Wastes may be disposed of on-site or at an approved waste disposal facility. Triple rinse (or equivalent) adding rinse water to spray tank. Offer container for recycling or dispose of container in sanitary landfill, or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org.

SECTION 14: TRANSPORT INFORMATION

14.1 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60)



Safety Data Sheet

SURFACT™

Number: SDS-038
Revision: 4

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

0 Least
1 Slight
2 Moderate
3 High
4 Severe

NFPA

2 Health
1 Flammability
0 Instability

HMIS

2 Health
1 Flammability
0 Reactivity
B PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate Y
Delayed N

Fire N
Reactive N

Sudden Release of Pressure N

Reportable Quantity (RQ) under U.S. CERCLA: Not applicable

SARA, Title III, Section 313: Not applicable

RCRA Waste Code: Not applicable

CA Proposition 65: WARNING: Not applicable

SECTION 16: OTHER INFORMATION

HMIS Rating 0-0-0

Department Issuing SDS Health and Safety

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow label directions carefully. Timing, method of application, weather, plant, crop or turf conditions and other factors are beyond the control of the seller.