BIOMEME, INC.
Safety Data Sheet

BLB - Biomeme Lysis Buffer

SECTION 1: Identification

1.1 Product identifier

Product name	BLB - Biomeme Lysis Buffer
Brand	Biomeme, Inc.

1.4 Supplier's details

Name	Biomeme, Inc.
Address	1015 Chestnut Street Suite 1401 Philadelphia PA 19107 USA
Telephone	267-930-7707
email	support@biomeme.com

SECTION 2: Hazard identification

General hazard statement
"Consumer Products", as defined by the US Consumer Product Safety Act and which are used as intended (typical consumer duration and frequency), are exempt from the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product.

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 2A
- Flammable liquids, Cat. 3
- Skin corrosion/irritation, Cat. 1A
- Eye damage/irritation, Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram

Signal word	**Danger**

Hazard statement(s)

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation

Precautionary statement(s)

P264	Wash … thoroughly after handling.
P280	Wear eye protection/face protection/protective gloves/protective clothing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/…/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use … to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to …
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor/...
P321	Specific treatment (see … on this label).
P405	Store locked up.

2.3 Other hazards which do not result in classification

Slip hazard from spills

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Component 1 (trade secret)*

Concentration	0 - 20 % (volume)

2. Component 2 (trade secret)*

Concentration	25 - 50 % (volume)

- Serious eye damage/eye irritation, Cat. 2

H319	Causes serious eye irritation

3. Component 3 (trade secret)*

Concentration	70 - 90 % (volume)

4. Component 4 (trade secret)*

Concentration	0 - 20 % (volume)

5. Component 5 (trade secret)*

Concentration	0 - 20 % (weight)

- Flammable liquids, Cat. 3
- Skin corrosion/irritation, Cat. 1A

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage

6. Guanidine Thiocyanate

Concentration	25 - 75 % (weight)
CAS no.	593-84-0

7. Component 7 (trade secret)*

Concentration	0 - 10 % (volume)

8. Component 8 (trade secret)*

Concentration	0 - 10 % (volume)

9. Component 9 (trade secret)*

Concentration	0 - 20 % (volume)

Trade secret statement (OSHA 1910.1200(i))
*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled	Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Wash contaminated clothing before reuse.

In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
If swallowed	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

4.2 Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary
No data available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical
No data available.

5.3 Special protective actions for fire-fighters
Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Further information
Use water spray to cool unopened containers. Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Warning: Do not touch or walk through spilled material. Spills can create very slippery surfaces. Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, or spray. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions
Do not contaminate water.

6.3 Methods and materials for containment and cleaning up
Stop leak if you can do it without risk. Sweep up and shovel into suitable containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Surfaces are very slippery from this product. Do not swallow. Do not breathe mist, vapors, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

7.2 Conditions for safe storage, including any incompatibilities

Freezing will adversely affect the quality of the product. Store locked up. Keep away from heat and sources of ignition. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Component 5 (trade secret)*

PEL (Inhalation): 25 mg/m3; USA (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 10 ppm; USA (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 10 ppm, (ST) 15 ppm, (C) 40 ppm; USA (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 10 ppm, (ST) 15 ppm; USA (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 10 ppm, (ST) 15 ppm; USA (ACGIH)
OSHA Annotated Table Z-1, www.osha.gov

TWA (Inhalation): 10 ppm; USA (ACGIH)
USA. ACGIH Threshold Limit Values (TLV)/ Pulmonary function

STEL (Inhalation): 15 ppm; USA (ACGIH)
USA. ACGIH Threshold Limit Values (TLV)/Pulmonary function. Upper Respiratory Tract irritation. Eye irritation

ST (Inhalation): 15 ppm
37 mg/m3; USA (NIOSH)
USA. NIOSH Recommended
Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm
25 mg/m3; USA (NIOSH)
USA. NIOSH Recommended
Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm
25 mg/m3; USA (OSHA)
USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

PEL (Inhalation): 10 ppm
25 mg/m3; USA (Cal/OSHA)
California permissible exposure limits for chemical contaminants
(Title 8, Article 107)

STEL (Inhalation): 15 ppm

37 mg/m3; USA (Cal/OSHA)
California permissible exposure limits for chemical contaminants
(Title 8, Article 107)

C (Inhalation): 40 ppm; USA (Cal/OSHA)
California permissible exposure limits for chemical contaminants
(Title 8, Article 107)

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms

Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin protection

Wear protective gloves, such as PVC or other plastic material. Consult manufacturer specifications for further information.

Body protection

Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

No data available.

Environmental exposure controls

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Colorless liquid.
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.

Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Contact with incompatible materials. Sources of ignition. Exposure to heat.

10.2 Chemical stability
Stable under normal storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents

Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Nitric acid

10.6 Hazardous decomposition products
Thermal decomposition may produce: nitrogen oxides, carbon oxides, sulfur oxides, hydrogen cyanide
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Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products - No data available
In the event of fire: see section 5

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Component 5
LD50 Oral - Rat - 3,310 mg/kg

Component 5
LC50 Inhalation - Mouse - 5620 ppm - 1 h
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Blood:Other changes.

Component 5
LC50 Inhalation - Rat - 11.4 mg/l - 4 h

Component 5
LD50 Skin - Rat - 1,112 mg/kg

EDTA
LD50 Oral - Rat - male and female - 4,500 mg/kg

Skin corrosion/irritation
Component 5
LD50 Skin - Rat - 1,112 mg/kg

Respiratory or skin sensitization
Component 5
LC50 Inhalation - Mouse - 5620 ppm - 1 h
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Blood:Other changes.

Component 5
LC50 Inhalation - Rat - 11.4 mg/l - 4 h

Germ cell mutagenicity
No data available.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available.

STOT-single exposure
No data available.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information

No data available.

SECTION 12: Ecological information

Toxicity
No data available on product

Persistence and degradability
No data available on product

Bioaccumulative potential
No data available on product

Mobility in soil
No data available on product

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal considerations

Disposal of the product
Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

DOT (US)
Not necessary.

IMDG
Not necessary.

IATA
Not necessary.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Pennsylvania Right To Know Components
CAS-No. 7732-18-5
CAS number: 64-19-7

CAS-No. 60-00-4

New Jersey Right To Know Components
CAS-No. 7732-18-5
CAS number: 64-19-7
CAS-No. 60-00-4

Massachusetts Right To Know Components
CAS number: 64-19-7
CAS-No. 60-00-4

SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Biomeme, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Biomeme, Inc. has been advised of the possibility of such damages.