SAFETY DATA SHEET

Lysis Buffer (cells)

Version 1.2 Revision Date 6/20/2020 Print Date: 6/20/20

Section 1. Identification

Product Name: Lysis Buffer, Lysis Buffer Cells

Product Number: LBC01, LBC02, LBC03, LBT01, LBT02, LBT03

Manufacturer or suppliers' details

Company: Life Magnetics, Inc.

Address: 440 Burroughs Suite 520, Detroit MI 48202

Phone: (734)673-8405

E-mail: info@magnetics.life

Recommended use of the chemicals and restrictions on use

Recommended use: Laboratory chemicals

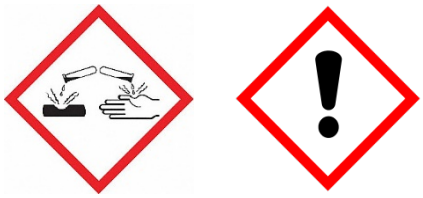
Section 2. Hazards Identification

GHS Classification

Acute Toxicity (oral):	Category 4
Skin Corrosion:	Category 1C
Serious Eye Damage:	Category 1
Chronic Aquatic Toxicity:	Category 3

GHS Label Element

Hazard Pictograms



Signal Word: Danger

Hazard Statements:
H302 Harmful if Swallowed
H314 Causes severe skin burns and eye damage
H412 Harmful to aquatic life with long lasting effects

Precautionary Statements: **Prevention**

P264 Washing skin thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Other Hazards
None known.

SECTION 3. Composition/Information on Ingredients

Substance/Mixture: Mixture
Substance Name: Lysis Buffer

Hazardous Ingredient

Chemical Name	CAS-No.	Concentration (% w/w)
Guanidinium Thiocyanate	593-84-0	>=15 - < 40

SECTION 4. First Aid Measures

General Advice: Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

If Inhaled: If unconscious, place in recovery position and seek medical attention. If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.

If swallowed: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: Harmful if swallowed, causes serious eye damage, causes severe burns.

Notes to physician: No information available.

SECTION 5. Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire-fighting:	Do not allow run-off to enter drains or water courses. Combustion products may be hazardous to health.
Hazardous combustion products:	Sulfur oxides, carbon oxides
Specific extinguishing methods:	In the event of fire do not breath fumes.
Special protective equipment:	Wear self-contained breathing apparatus for fire-fighting if necessary.

SECTION 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Environmental precautions:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Unsuitable cleaning agents: sodium hypochlorite.

SECTION 7. Handling and Storage

Advice on protection against fire and explosion:	Normal measures for preventative fire protection.
Advice on safe handling:	Do not breath vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place.

SECTION 8. Exposure Controls/Personal Protection

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Chemical Name	CAS-No.	Concentration (% w/w)
Guanidinium Thiocyanate	593-84-0	>=15 - < 40

Personal Protective Equipment

Hand Protection Material:	Protective gloves.
Remarks:	The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Eye Protection:	Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems. Do not wear contact lenses. Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and Body Protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Acid-resistant protective clothing. Footwear protecting against chemicals.
Hygiene Measures:	Keep away from food and drink. Wash hands before breaks and at the end of workday. Ensure adequate ventilation, especially in confined areas. Avoid contact with the skin and the eyes. When using do not eat, drink or smoke.

SECTION 9. Physical and Chemical Properties

Appearance:	liquid
Color:	colorless
Odor:	No data available
Odor threshold:	No data available
pH:	7
Melting point/range	No data available
Boiling point/boiling range	No data available
Flash point	No data available

Evaporation rate	No data available
Burning rate	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapor pressure	No data available
Relative vapor density	No data available
Relative density	No data available
Density	1.09 g/cm^3 (at 25 ºC)
Solubility(ies)	
- Water solubility	No data available
- Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	
- Viscosity, dynamic	No data available
- Viscosity, kinematic	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

SECTION 10. Stability and Reactivity

Reactivity:	No decomposition if stored and applied as directed.
Chemical stability:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions:	Stable under recommended storage conditions.
	Hazardous decomposition products formed under fire conditions.
	Keep away from oxidizing agents, and acidic or alkaline products.
Conditions to avoid:	No data available
Incompatible materials:	No data available
Hazardous decomposition products:	No decomposition if stored and applied as directed.

SECTION 11. Toxicological Information

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity:	Acute toxicity estimate: 1,578 mg/kg Method: calculation method. No data available.
Acute inhalation toxicity:	Acute toxicity estimate: 29.26 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method No data available
Acute dermal toxicity:	Acute toxicity estimate: 2,926 mg/kg Method: calculation method. No data available.

Ingredients:

guanidinium thiocyanate:

Acute oral toxicity:	LD50 Oral (Rat, female): 593 mg/kg Method: OECD Test Guideline 401
Acute toxicity: (other routes of administration)	LD50 (Mouse): 300 mg/kg

Skin corrosion/irritation

Causes severe burns.

Remarks:

Extremely corrosive and destructive to tissue. Causes skin burns.

Serious eye damage/eye irritation

Causes serious eye damage. May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

No data available

SECTION 12. Ecological Information

Ecotoxicity

Product:

Toxicity to fish:	No data available
Toxicity to algae:	No data available
Toxicity to bacteria:	No data available

Ingredients:

guanidinium thiocyanate:

Toxicity to fish:	LC50 (Poecilia reticulata (guppy)): 89.1 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:	EC50 (Daphnia): 42.4 mg/l Exposure time: 48 h
Toxicity to fish (Chronic toxicity):	NOEC (Poecilia reticulata (guppy)): 25 mg/l Exposure time: 96 d

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Bioaccumulation:	No data available
Mobility in soil:	No data available

Other adverse effects:

Product:

Ozone-Depletion Potential:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal Considerations

Disposal methods

Waste from residues:	The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging:	Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport Information

DOT (US)
UN Number: 1760 Class: 8 Packing Group: III
Proper shipping name: Corrosive liquids, n.o.s. (Guanidinium Thiocyanate)
Reportable quantity:
Poison inhalation hazard: No

IMDG
UN Number: 1760 Class: 8 Packing Group: III EMS-No: F-A, S-B
Proper shipping name: CORROSIVE LIQUID, N.O.S. (Guanidinium Thiocyanate)

IATA
UN Number: 1760 Class: 8 Packing Group: III EMS-No: F-A, S-B
Proper shipping name: Corrosive liquids, n.o.s. (Guanidinium Thiocyanate)