



Trade name: Lysis Buffer, pH 5

SECTION 1: Identification

Product identifier used on the label:

Product Name: Lysis Buffer, pH 5

Other means of identification:

Product Codes: 14-20342

Recommended use of the chemical and restrictions on use:

Recommended use: For Professional use only. Use as per Product Insert.

Recommended restrictions: Uses other than as recommended above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Luminex Corporation.
Company Address: 12212 Technology Blvd
Austin, Texas 78727
Company Telephone: Tel: 1-512-381-4397
Fax: 1-512-219-5114
<http://www.luminexcorp.com>

Company Contact Email: support@luminexcorp.com

Emergency phone number: 1-(512) 381-4397 (24/7)

SECTION 2: Hazard(s) identification

UNITED STATES

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

None expected

Health hazards

Acute Toxicity, Oral, Category 4
Acute Toxicity, Dermal, Category 4
Skin Corrosion Category 1C
Serious Eye Damage, Category 1
Acute Toxicity, Inhalation, Category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: DANGER

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GHS Hazard statement(s): Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- If swallowed: Call a poison center/doctor if you feel unwell.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin: Wash with plenty of water.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- 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/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.

Storage:

- None required

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

CANADA

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

None known

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Health hazards

Acute Toxicity, Oral, Category 4
Acute Toxicity, Dermal, Category 4
Skin Corrosion Category 1C
Serious Eye Damage, Category 1
Acute Toxicity, Inhalation, Category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: **DANGER**

GHS Hazard statement(s): Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Do not breathe dust/fume/gas/mist/ vapours/spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN: Wash with plenty of water
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.

Storage:

- None required.

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Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Hazard(s) not otherwise classified (HNOC):

None known.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable

SECTION 3: Composition/information on ingredients

Chemical name	CAS#	Concentration (weight %)
Guanidinium Thiocyanate	593-84-0	50-55%
Octylphenol polyethoxyethanol	9036-19-5	3-5%

Note: The balance of the ingredients for each compartment are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910. 1200 and HPR WHMIS 2015.

SECTION 4: First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

Skin contact: Remove contaminated clothing. Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

Eye contact: In case of eye contact, remove contact lenses and rinse immediately with plenty of water, including under the eyelids, for at least 15 mins. Get medical attention if symptoms develop.

Ingestion: Do NOT induce vomiting. Get medical attention immediately. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed:

Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

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Indication of immediate medical attention and special treatment needed:

If any symptoms are observed, contact a physician and give them this SDS sheet. Provide general supportive measures and treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Hazardous combustion products may include the following substances: Carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides.

Special protective equipment and precautions for fire-fighters:

Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Keep out of drains, sewers, ditches and waterways. Inhalation is a health risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Wear self-contained breathing apparatus and protective clothing. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training.

Avoid contact with skin, eyes and clothing. Ventilate contaminated area thoroughly. Avoid contact with spilled or released material. Stay upwind and away from spill/release.

Wear appropriate protective equipment, such as gloves, goggles and protective clothing, as conditions warrant (see Section 8).

See Sections 2 and 7 for additional information on hazards and precautionary measures.

See Section 13 for disposal guidance.

Methods and materials for containment and cleaning up:

Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Shut off leaks, if possible. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Absorb spill with inert material and place in suitable container for disposal.

SECTION 7: Handling and storage

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Precautions for safe handling:

Keep away from heat, sparks and open flames. No smoking. Use only with adequate ventilation. Wear appropriate personal protective equipment and use exposure controls as indicated in Section 8. Avoid contact with skin and eyes. Avoid breathing product dust or vapors. Wash with soap and water after working with this product.

Conditions for safe storage, including any incompatibles:

Keep away from flame, sparks, excessive temperatures and open flames. Keep away from strong oxidizers, ignition sources and heat.

Storage temperature: Store at 15°C to 30°C upon receipt.

SECTION 8: Exposure controls/personal protection

Control Parameters

Ingredients with occupational exposure limits are listed below.

Ingredient	Occupational Exposure Limits
Guanidinium Thiocyanate	None known
Octylphenol polyethoxyethanol	None known

Appropriate engineering controls:

No special ventilation requirements. Apply technical measures to comply with the occupational exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Ensure adequate ventilation to keep airborne concentrations low. Do not empty waste into water drains.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Not required under normal conditions of use.

Skin and hand protection: Not required under normal conditions of use. Wash hands after use.

Respiratory protection: Not required under normal conditions of use

General hygiene considerations: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Wash hands after use.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.):

Physical state: Liquid.

Color: Slightly orange to colorless

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Odor:	Sour - Vinegar
Odor threshold:	Not determined
pH:	4.95 to 5.10
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined.
Evaporation rate:	Not determined
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	Not determined
Flammability limit – upper (%):	Not determined
Explosive limit – lower (%):	Not determined
Explosive limit – upper (%):	Not determined
Vapor pressure:	Not determined
Vapor density:	Not determined
Relative density:	Not determined
Solubility (ies):	Not determined
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined

SECTION 10: Stability and reactivity

Reactivity:	This product is not expected to be reactive under normal handling and storage conditions.
Chemical stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Avoid all possible sources of ignition (spark or flame).
Incompatible materials:	Strong oxidizing agents, acids
Hazardous decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Expected to be a route of exposure

Ingestion: Expected to be a route of exposure

Skin: Expected to be a route of exposure

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Eyes: Expected to be a route of exposure

Symptoms related to the physical, chemical, and toxicological characteristics:

Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

Delayed and immediate effects and chronic effects from short or long-term exposure:

No additional information known.

Numerical measures of toxicity (such as acute toxicity estimates):

Ingredient Information:

Substance	Test Type (species)	Value
Guanidinium Thiocyanate	LD ₅₀ Oral (Rat)	354 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 17273 mg/L 4h
Octylphenol polyethoxyethanol	LD ₅₀ Oral (Rat)	1900 - 5000 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 3000 mg/kg
	LC ₅₀ Inhalation (Rat)	None known

Acute toxicity:

Harmful if swallowed, in contact with skin or if inhaled.

Skin corrosion/irritation:

Causes severe skin burns

Serious eye damage/eye irritation:

Causes serious eye damage. Risk of corneal clouding.

Respiratory or skin sensitization:

Not expected to cause respiratory sensitization. Not expected to cause skin sensitization or allergic reaction.

Germ cell mutagenicity:

Not expected to cause genetic defects.

Carcinogenicity:

This product is not expected to cause cancer.

Reproductive toxicity:

Not expected to damage fertility or the unborn child.

STOT – Single exposure:

Not expected to cause specific target organ toxicity after a single exposure.

STOT – Repeat exposure:

Not expected to cause specific target organ toxicity after prolonged or repeated exposure.

Aspiration hazard:

This product is not anticipated to be an aspiration hazard if swallowed.

If the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the

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International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Chemical Name	ACGIH	IARC	NTP	OSHA
Guanidinium Thiocyanate	Not listed	Not listed	Not listed	Not listed
Octylphenol polyethoxyethanol	Not listed	Not listed	Not listed	Not listed

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Ingredient Information:

Substance	Test Type	Species	Value
Guanidinium Thiocyanate	LC ₅₀	Fish <i>Poecilia reticulata</i>	89.1 mg/l 96 h
	EC ₅₀	Invertebrates <i>Daphnia magna</i>	42.4 mg/L 48 h
	ErC ₅₀	Algae	None known
Octylphenol polyethoxyethanol	LC ₅₀	Fish <i>Leuciscus idus</i>	0.26 mg/l 96 h
	EC ₅₀	Invertebrates <i>Daphnia magna</i>	0.011 mg/L 48 h
	EC ₅₀	Algae <i>Pseudokirchneriella subcapitata</i>	1.9 mg/l - 96 h

Persistence and Degradability:

No data available for this product

Bioaccumulative Potential:

No data available for this product

Mobility in Soil:

No data available for this product

Other adverse effects (such as hazardous to the ozone layer):

None known

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental

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protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous Waste

The classification of the product may meet the criteria for hazardous waste.

Contaminated packaging – methods of disposal

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered where recycling is not feasible.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

UN 1760 CORROSIVE LIQUID, N.O.S. (contains Guanidine thiocyanate), 8, III

IMDG (Transport by sea)

UN 1760 CORROSIVE LIQUID, N.O.S. (contains Guanidine thiocyanate), 8, III

IATA (Country variations may apply)

UN 1760 CORROSIVE LIQUID, N.O.S. (contains Guanidine thiocyanate), 8, III

Environmental hazards

Marine pollutant: YES

Additional information:

DOT: Limited Quantity Exemption

IATA: Limited Quantity Exemption

IMDG: Limited Quantity Exemption

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None known

SECTION 15: Regulatory Information

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USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

**Emergency Planning and Community Right To-Know Act (EPCRA)
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):** None listed

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370 (amended 2018)):

Skin corrosion or irritation
Serious eye damage or eye irritation
Acute toxicity (any route of exposure)

Section 313 Toxic Chemicals (40 CFR 372.65):
None listed

STATE REGULATIONS:

This SDS contains specific health and safety data that is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): None listed.

Massachusetts Right to Know: None of the components are listed on the Massachusetts Right to Know list.

New Jersey Right to Know None of the components are listed on the New Jersey Right to Know List.

Pennsylvania Right to Know: None of the components are listed on the Pennsylvania Right to Know List.

CANADA:

This SDS complies with the requirements of WHMIS 2015.

Canadian NPRI: None of the components are listed on the National Pollutant Release Inventory

DSL: The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

SECTION 16: Other Information

Revision Date: November 14, 2022

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DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.