



Trade name: xMAP® Sheath Concentrate PLUS

SECTION 1: Identification

Product identifier used on the label:

Product Name: xMAP® Sheath Concentrate PLUS

Other means of identification:

Commercial name(s): xMAP® Sheath Concentrate PLUS

Product Codes: 40-50036, 40-50023, 13-90005

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 known

Health hazards

Acute toxicity, oral, category 4
Acute toxicity, dermal, category 4
Acute toxicity, inhalation, category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: WARNING

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GHS Hazard statement(s): Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Avoid breathing dust/fume/gas/mist/ vapors/spray.
- Wash thoroughly after handling
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing.

Response:

- If swallowed: Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of water
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- Call a poison center/doctor if you feel unwell.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Rinse mouth
- 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

Supplemental Hazard Statements: None known

CANADA

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

Physical hazards

None known

Health hazards

Acute toxicity, oral, category 4

Acute toxicity, dermal, category 4

Acute toxicity, inhalation, category 4

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Environmental hazards

Not adopted under WHMIS 2015

GHS Signal word:

WARNING

GHS Hazard statement(s):

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Avoid breathing dust/fume/gas/mist/ vapours/spray.
- Wash thoroughly after handling
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/ protective clothing /eye protection/face protection.

Response:

- IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
- IF ON SKIN: Wash with plenty of water
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a POISON CENTRE/doctor if you feel unwell.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Rinse mouth
- 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

Supplemental Hazard

Statements:

None known

Hazard(s) not otherwise classified (HNOC):

Contact with acids liberates very toxic gas.

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Percentage of ingredient(s) of unknown acute toxicity:

Not applicable

SECTION 3: Composition/information on ingredients

Chemical name	CAS#	Concentration (weight %)
Dazolidinyl urea	78491-02-8	1 - 5%
Sodium azide	26628-22-8	0.1 - 1%

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 to fresh air, Get medical attention immediately if symptoms occur.

Skin contact: Wash off with warm water and soap, Get medical attention if irritation develops and persists, Remove and wash contaminated clothing before re-use.

Eye contact: In case of eye contact, remove any contact lenses and flush for at least 15 minutes. If eye irritation develops, consult a specialist.

Ingestion: Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed:

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

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. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known

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

Not expected to be flammable but may release toxic and corrosive fumes. In the case of a fire, take into account the surrounding area.

Hazardous combustion products: Carbon dioxide, carbon monoxide, nitrogen oxides, sodium 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. 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. Keep unnecessary and unprotected personnel from entering. Avoid contact with the skin and the eyes. Avoid breathing vapours, mist or gas. 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.

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

Precautions for safe handling:

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. Remove contaminated clothing. 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
Dazolidinyl urea	None known
Sodium azide	US – OSHA Vacated PELs - 0.1 ppm Ceiling (as HN3); 0.3 mg/m3 Ceiling (as NaN3) US – ACGIH TLV-TWA - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) U.S. – NIOSH - 0.1 ppm Ceiling (as HN3); 0.3 mg/m3 Ceiling (as NaN3) Canada - Nunavut - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapour) Canada - Northwest Territories - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapour) Canada - Nova Scotia - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) Canada - Newfoundland & Labrador - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) Canada - Prince Edward Island - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) Canada - Ontario - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) Canada - British Columbia - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapour) Canada - Quebec - 0.11 ppm Ceiling; 0.3 mg/m3 Ceiling Canada - Alberta - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapour). 0.3 mg/m3 STEL (as Hydrazoic acid vapour) Canada - Manitoba - 0.29 mg/m3 Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor) Canada - New Brunswick - 0.11 ppm Ceiling (vapor, as Hydrazoic acid); 0.29 mg/m3 Ceiling (as NaN3) Canada - Saskatchewan - 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (as Hydrazoic acid vapour) Canada - Yukon - 0.1 ppm Ceiling; 0.3 mg/m3 Ceiling

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:

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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: Colorless

Odor: Odorless.

Odor threshold: Not determined

pH: Not determined

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 determined

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

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handling and storage conditions.

- Chemical stability:** Material is stable under normal conditions.
Possibility of hazardous reactions: None expected.
Conditions to avoid: None known.
Incompatible materials: Strong oxidizing agents, strong acids, strong bases
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
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.

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:

Acute toxicity: Harmful if swallowed, in contact with skin or if inhaled

Substance	Test Type (species)	Value
Dazolidinyl urea	LD ₅₀ Oral (Rat)	> 2000 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	1.35 mg/L 4.5h
Sodium azide	LD ₅₀ Oral (Rat)	20 mg/kg
	LD ₅₀ Dermal (Rabbit)	50 mg/kg
	LC ₅₀ Inhalation (Rat)	27 mg/kg 4h

- Skin corrosion/irritation:** Not expected to cause skin irritation
Serious eye damage/eye irritation: Not expected to cause eye irritation.
Respiratory or skin sensitization: Not expected to cause respiratory sensitization. Not expected to cause skin sensitization or allergic reaction.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Dazolidinyl urea	Not listed	Not listed	Not listed	Not listed
Sodium azide	Not listed	Not listed	Not listed	Not listed

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Ingredient Information: Harmful to aquatic life with long lasting effects

Substance	Test Type	Species	Value
Dazolidinyl urea	LC ₅₀	Fish <i>Oncorhynchus mykiss</i>	>100 mg/L 96h
	EC ₅₀	Invertebrates <i>Daphnia magna</i>	58 mg/L 24 h
	ErC ₅₀	Algae <i>Pseudokirchneriella subcapitata</i>	78 mg/L 72h
Sodium azide	LC ₅₀	Fish <i>Lepomis macrochirus</i>	0.68 mg/L 96 h
	EC ₅₀	Invertebrates <i>Daphnia pulex</i>	4.2 mg/L 48 h
	EC ₅₀	Algae <i>Pseudokirchneriella subcapitata</i>	0.348 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 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 a 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)

Not classified as hazardous for transport

IMDG (Transport by sea)

Not classified as hazardous for transport

IATA (Country variations may apply)

Not classified as hazardous for transport

Environmental hazards

Marine pollutant: No

Additional information:

Limited Quantity Exemption: Not applicable

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.

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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

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):

Sodium Azide: 1000 lb EPCRA RQ. 500 lb TPQ (this material is a reactive solid, the TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)

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

Acute toxicity (any route of exposure)

Section 313 Toxic Chemicals (40 CFR 372.65):

Sodium Azide: 1.0 % de minimis concentration

STATE REGULATIONS:

This SDS contains specific health and safety data 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: Sodium Azide is listed on the Massachusetts Right to Know list.

New Jersey Right to Know Sodium Azide is listed on the New Jersey Right to Know List.

Pennsylvania Right to Know: Sodium Azide is 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: Sept 30, 2022

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.