

<i>Luminex</i> [®]	SAFETY DATA SHEET	
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Complying with Regulation (EC) No 1272/2008 (CLP) as amended by Commission Regulation (EU) 2020/878 and GB CLP – (United Kingdom)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

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

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For Professional use only. Use as per Product Insert

Uses advised against: Uses other than those described above.

1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone number

Emergency telephone number (including hours of operation): 1-(512) 381-4397

Emergency email: support@luminexcorp.com

Hours of operations: 24/7

Poison Centre Information:

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland.

Members of the public:

In an emergency, if the patient has collapsed or is not breathing properly, call 999

For medical advice contact:

NHS 111 in England: 111

NHS 24 in Scotland: 111

NHS Direct in Wales: 111 or 0845 4647

In Northern Ireland: contact your local GP or pharmacist during normal hours; click here for GP services Out-of-Hours.

In Ireland: contact NPIC on (01) 809 2166 (8 am to 10 pm); outside of these hours contact your GP or hospital emergency department.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance to Regulation (EC) No. 1272/2008 (CLP/GHS) as adopted by the United Kingdom (GB CLP)

Product name	GHS Classification
xMAP[®] Sheath Concentrate PLUS	Acute toxicity, oral, category 4 H302 Acute toxicity, dermal, category 4 H312 Acute toxicity, inhalation, category 4 H332

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2.2 Label elements

Labelling in accordance with Regulation 1272/2008 (GB CLP)

Hazard pictograms:



Signal word: WARNING

Hazard statements: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements: P261 - Avoid breathing dust/fume/gas/mist/ vapours/spray.
P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P273 - Avoid release to the environment
P312 - Call a POISON CENTRE/doctor if you feel unwell
P501 - Dispose of contents/container to a suitable disposal site in accordance with local/regional/national/international regulations

Supplemental Hazard Statements. None known

2.3 Other hazards

This substance/mixture does not contain any components at concentrations of > 0.1%, which are considered to be an endocrine-disrupting substance.

No components are classified as persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances :

Not applicable

3.2 Mixture :

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
Dazolidinyl urea	CAS No 78491-02-8 EC No REACH No 01- 2119980740- 34-XXXX	1 - 5%	Eye Irrit 2 H319	No	1	No SCL in Annex VI	No ATE in Annex VI

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
Sodium azide	CAS No 26628-22-8 EC No 247-852-1 REACH No 01- 2119457019- 37-XXXX	0.1 - 1%	Acute Tox 2 Oral H300 Acute Tox 1 Dermal H310 Acute Tox 2 dust/mist H330 STOT RE 2 (CNS, cardiovasc, liver, kidney, heart, spleen) H373 Aqu acute 1 H400 Aqu chronic 1 H410 EUH032	No	1	No SCL in Annex VI	No ATE in Annex VI

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8 .
See section 16 for the full text of the H and P statements declared above

Nanoforms present in product: Not applicable

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

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.

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.

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

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

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any 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: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable 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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5.2 Special hazards arising from the substance or mixture

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.

5.3 Advice for firefighters

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

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering.

For emergency responders

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).

6.2 Environmental precautions

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.

6.3 Methods and materials for containment and cleaning up

Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Absorb spill with inert material and place in suitable container for disposal.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities

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

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

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None Listed

7.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values:

Ingredient name	CAS Number	Occupational exposure limits	Source
Dazolidinyl urea	78491-02-8	Short-term value: None known Long-term value: None known	UK EH40/2005 Workplace exposure limits (updated 2020)
Sodium azide	26628-22-8	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³	UK EH40/2005 Workplace exposure limits (updated 2020)

Monitoring procedures: Use methods described in European Standards.

Derived No Effect Level (DNEL):

Dazolidinyl urea

Application Area	Exposure routes	Health Effect	Value
Workers	Inhalation	Long-term systemic effects	20.5 mg/m ³
Workers	Inhalation	Short-term systemic effects	92 mg/m ³
Workers	Dermal	Long-term systemic effects	11.7 mg/kg bw/day
General population	Oral	Long-term systemic effects	5 mg/kg bw/day

Sodium azide

Application Area	Exposure routes	Health Effect	Value
Workers	Inhalation	Long-term systemic effects	0.164 mg/m ³
Workers	Dermal	Long-term systemic effects	46.7 µg/kg bw/day
General population	Inhalation	Long-term systemic effects	29 µg/m ³
General population	Dermal	Long-term systemic effects	16.7 µg/kg bw/day
General population	Oral	Long-term systemic effects	16.7 µg/kg bw/day

Predicted No Effect Concentration (PNEC):

Dazolidinyl urea

Compartment	Value
Fresh water	5.78 µg/L
Marine water	0.58 µg/L
Sewage treatment plant	20 mg/L
Fresh water sediment	88.8 µg/kg sediment dw
Marine sediment	8.9 µg/kg sediment dw
Soil	14.4 µg/kg soil dw

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Sodium azide

Compartment	Value
Fresh water	0.35 µg/L
Marine water	15 ng/L
Sewage treatment plant	30 µg/L
Fresh water sediment	16.7 µg/kg sediment dw
Marine sediment	0.72 µg/kg sediment dw

8.2 Exposure controls

Appropriate Engineering Measures

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 and face protection: Not required under normal conditions of use.

Skin protection:

Hand protection: Not required under normal conditions of use.

Other skin protection: Not required under normal conditions of use. Wash hands after use.

Respiratory protection: Not required under normal conditions of use.

Thermal hazards: None known.

Environmental exposure controls: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains or water systems.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State:	Liquid.
Colour:	Colourless
Odour and odour threshold:	Odourless
Melting point/Freezing point:	Not Determined
Boiling point or initial boiling point and boiling range:	Not Determined
Flammability:	Not Determined
Lower and upper explosion limit::	
Lower (%):	Not Determined
Upper (%):	Not Determined
Flash point:	Not Determined
Auto-ignition temperature:	Not Determined
Decomposition temperature:	Not Determined
pH:	Not Determined.
Kinematic viscosity:	Not Determined
Solubility:	Not Determined

Partition coefficient
n-octanol/water (log value): Not Determined
Vapour pressure: Not Determined
Density and/or relative density: Not Determined
Relative vapour density: Not Determined
Decomposition temperature: Not Determined
Particle characteristics: Not Determined

9.2 Other information:

Information with Regard to
Physical Hazard Classes: None known
Other Safety Characteristics: None known

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

This product is not expected to be reactive under normal handling and storage conditions.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

None expected

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases

10.6 Hazardous Decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

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

Product/ingredient name	Test	Species	Dose
Dazolidinyl urea	LD50 Oral	Rat	> 2000 mg/kg
	LD50 Dermal	Rabbit	> 2000 mg/kg
	LC50 Inhalation	Rat	1.35 mg/L 4.5h
Sodium azide	LD50 Oral	Rat	20 mg/kg
	LD50 Dermal	Rabbit	50 mg/kg
	LC50 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.

Germ cell mutagenicity:	Not expected to cause heritable mutations in human germ cells.
Carcinogenicity:	Not expected to cause cancer.
Reproductive toxicity:	Not expected to cause damage to 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:	This product is 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.

11.2 Information on other hazards:

Endocrine disrupting properties:	None of the components have endocrine disrupting properties
Information on other hazards:	None known

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity:**

Harmful to aquatic life with long lasting effects

Substance name	Toxicity to fish / other aquatic invertebrates
Dazolidinyl urea	Fish - LC50 Oncorhynchus mykiss >100 mg/L 96h Invertebrates - EC50 Daphnia magna 58 mg/L 48h Algae – EC50 Pseudokirchneriella subcapitata .78 mg/L 72h
Sodium azide	Fish - LC50 Lepomis macrochirus 0.68 mg/L 96 h Invertebrates - EC50 Daphnia pulex 4.2 mg/L 48 h Algae - EC50 Pseudokirchneriella subcapitata 0.348 mg/L 96 h

12.2 Persistence and Degradability:

No data available for this product

12.3 Bioaccumulative potential:

No data available for this product

12.4 Mobility in soil:

No data available for this product

12.5 Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

None known.

12.7 Other adverse effects:

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

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13.1 Waste treatment methods:

Methods of disposal

The generation of waste should be avoided or minimised 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 minimised 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. Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

International transport regulations

14.1 UN number:

ADR/RID/ADN: Not applicable IMDG: Not applicable IATA: Not applicable

14.2 Proper shipping name:

ADR/RID/ADN: Not regulated for transport

IMDG: Not regulated for transport

IATA: Not regulated for transport

14.3 Transport hazard class(es)

ADR/RID/ADN: Not applicable IMDG: Not applicable IATA: Not applicable

14.4 Packing group

ADR/RID/ADN: Not applicable IMDG: Not applicable IATA: Not applicable

14.5 Environmental hazard

Marine Pollutant: Not expected

Additional information:

ADR/RID/ADN: Not applicable

IATA: Not applicable

IMDG: Not applicable

14.6 Special precautions for user

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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

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Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of:

EU Commission Regulation (EU) 2020/878 (REACH)

EU Regulation (EC) No 1272/2008 (CLP)

EINECS: All components in this product are listed on the European Inventory of Existing Chemical Substance

Annex XIV - List of substances subject to authorisation

None known

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out on this product.

Section 16: OTHER INFORMATION

Full text of H and P-Statements referred to under sections 2 and 3.

H300	Fatal if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE/doctor if you feel unwell
P321	Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse
P501	Dispose of contents/container to a suitable disposal site in accordance with local/regional/national/international regulations

Training advice: Before using/handling the product one must read carefully present SDS.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not applicable

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European)
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
CLP:	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL:	Derived No Effect Level
EC50:	Half maximal effective concentration
EINECS:	European Inventory of Existing Commercial Chemical Substances
EU:	European Union
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
IATA:	International Air Transport Association
IBC:	International Bulk Code
IMDG:	International Maritime Code for Dangerous Goods
IOELV:	Indicative Occupational Exposure Limit Value
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
MARPOL:	International Convention for the Prevention of Pollution from Ships
OEL:	Occupational Exposure Level
PBT:	Persistent, Bioaccumulative and Toxic
PNEC:	Predicted No Effect Level
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
SCBA:	Self Contained Breathing Apparatus
SCL:	Specific Concentration Limits
UN:	United Nations
VPvB:	Very Persistent and very Bioaccumulative
WEL:	Workplace Exposure Limit

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