

# SAFETY DATA SHEET

**Luminex**<sup>®</sup>

## xMAP<sup>®</sup> Sheath Concentrate PLUS

### Section 1. Identification

<b>Product name</b>	: xMAP <sup>®</sup> Sheath Concentrate PLUS
<b>Product code</b>	:
<b>Other means of identification</b>	: Not available.
<b>Product type</b>	: Liquid.
<b><u>Relevant identified uses of the substance or mixture and uses advised against</u></b>	
<b>Identified uses</b>	: For Professional use only. Use as per Product labeling.
<b>Supplier's details</b>	: Luminex Corporation 12212 Technology Blvd Austin, Texas 78727 Tel: 1-512-381-4397 Toll free: 1-877-785-2323 (US and Canada) Fax: 1-512-219-5114 <a href="http://www.luminexcorp.com">http://www.luminexcorp.com</a>
<b>Emergency telephone number (with hours of operation)</b>	: <a href="mailto:Support@Luminexcorp.com">Support@Luminexcorp.com</a>
<b>e-mail address of person responsible for this SDS</b>	: 1-512-381-4397 24/7

### Section 2. Hazards identification

<b>HSNO Classification</b>	: 6.4 - EYE IRRITATION - Category A (Irritant) 6.5 - SENSITIZATION - Category B (Skin)
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This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

#### GHS label elements

<b>Signal word</b>	: Warning
<b>Hazard statements</b>	: Causes serious eye irritation. May cause an allergic skin reaction.
<b><u>Precautionary statements</u></b>	
<b>Prevention</b>	: Wear protective gloves. Wear eye or face protection. Avoid breathing vapour. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
<b>Response</b>	: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	: Not applicable.



## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Symbol** :



**Other hazards which do not result in classification** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

Ingredient name	% (w/w)	CAS number
Sodium chloride	10 - 30	7647-14-5
1-[1,3-bis(Hydroxymethyl)-2,5-dioxoimidazolidin-4-yl]-1,3-bis(hydroxymethyl)urea	1 - 5	78491-02-8
Disodium phosphate heptahydrate	1 - 5	7782-85-6

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.

## Section 4. First aid measures

### Description of necessary first aid measures

**Inhalation** : Not applicable.

**Ingestion** : Not applicable.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : May cause an allergic skin reaction.

**Eye contact** : Causes serious eye irritation.

#### Over-exposure signs/symptoms

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin** : No known significant effects or critical hazards.

## Section 4. First aid measures

**Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### Indication of immediate medical attention and special treatment needed, if necessary

**Specific treatments** : No specific treatment.  
**Notes to physician** : None identified.  
**Protection of first-aiders** : No special measures required.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

**Suitable** : Use an extinguishing agent suitable for the surrounding fire.  
**Not suitable** : None known.  
**Specific hazards arising from the chemical** : No specific fire or explosion hazard.  
**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
phosphorus oxides  
halogenated compounds  
metal oxide/oxides  
**Hazchem code** : Not available.  
**Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.  
**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** : Put on appropriate personal protective equipment (see Section 8).  
**Environmental precautions** : No special requirements.  
**Methods and material for containment and cleaning up**  
**Spill** : Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

## Section 7. Handling and storage

**Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8).  
**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store at 15°C to 30°C.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

**Appropriate engineering controls** : No special ventilation requirements.

**Environmental exposure controls** : No special measures required.

### Individual protection measures

**Hygiene measures** : Follow good industrial hygiene practice.

**Respiratory protection** : Not required under normal conditions of use.

**Hand protection** : Not required under normal conditions of use.

**Eye protection** : Not required under normal conditions of use.

**Skin protection** : Not required under normal conditions of use.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Liquid. [Clear.]
<b>Colour</b>	: Colourless.
<b>Odour</b>	: Odourless.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: 6.6
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Not applicable.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: Not applicable.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Flow time (ISO 2431)</b>	: Not available.

## Section 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- 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** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

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

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1-[1,3-bis(Hydroxymethyl)-2,5-dioximidazolidin-4-yl]-1,3-bis(hydroxymethyl)urea	LD50 Oral	Rat	2600 mg/kg	-
Disodium phosphate heptahydrate	LD50 Oral	Rat	12930 mg/kg	-

#### Irritation/Corrosion

There is no data available.

#### Sensitisation

There is no data available.

#### Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitised, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Eye contact** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.

## Section 11. Toxicological information

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Chronic toxicity

There is no data available.

### Carcinogenicity

There is no data available.

### Mutagenicity

There is no data available.

### Teratogenicity

There is no data available.

### Reproductive toxicity

There is no data available.

### Specific target organ toxicity

There is no data available.

### Aspiration hazard

There is no data available.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	18939.39 mg/kg

## Section 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Sodium chloride	Acute EC50 2430000 µg/L Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/L Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 4.96 µg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/L Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/L Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/L Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	1-[1,3-bis(Hydroxymethyl)-2,5-dioxoimidazolidin-4-yl]-1,3-bis(hydroxymethyl)urea	Acute EC50 58 ppm Fresh water	Daphnia - Daphnia magna
Acute LC50 >150 ppm Fresh water		Fish - Oncorhynchus mykiss	96 hours

### Persistence/degradability

## Section 12. Ecological information

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimised wherever possible. No specific disposal consideration.

## Section 14. Transport information

	<b>New Zealand</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.

**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.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

**HSNO Approval Number** : Not available.

**HSNO Group Standard** : Not available.

**HSNO Classification** : 6.4 - EYE IRRITATION - Category A (Irritant)  
6.5 - SENSITIZATION - Category B (Skin)

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are active or exempted.
<b>Viet Nam</b>	: All components are listed or exempted.

## Section 16. Other information

### History

<b>Date of issue/Date of revision</b>	: 15/06/2020
<b>Date of previous issue</b>	: 15/03/2016
<b>Version</b>	: 4
<b>Prepared by</b>	: KMK Regulatory Services Inc.
<b>Key to abbreviations</b>	: ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail SGG = Segregation Group UN = United Nations
<b>References</b>	: Not available.



## Section 16. Other information

### Notice to reader

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

