SAFETY DATA SHEET

xMAP[®] Sheath Fluid



Section 1. Identification

| GHS product identifier | : xMAP [®] Sheath Fluid |
|----------------------------------|-----------------------------------|
| Other means of identification | : Not available. |
| Product type Code | : Liquid. : 40-50000, 40-50015 |
| | |

Identified uses

For professional use only. Refer to Product insert.

| Supplier/Manufacturer | : 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 Email: support@luminexcorp.com |
|--|--|
| Emergency telephone number (with hours of operation) | : 1-512-381-4397 24/7 |

Section 2. Hazards identification

| OSHA/HCS status | : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
|---|--|
| Classification of the substance or mixture | : Not classified. |
| GHS label elements | |
| Signal word | : No signal word. |
| Hazard statements | : No known significant effects or critical hazards. |
| Precautionary statements | |
| Prevention | : Not applicable. |
| Response | : Not applicable. |
| Storage | : Not applicable. |
| Disposal | : Not applicable. |
| Hazards not otherwise class | <u>sified (HNOC)</u> |
| Physical hazards not otherwise classified (PHNOC) | : None known. |
| Health hazards not otherwise classified (HHNOC) | : None known. |



Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

CAS number

: Not applicable.

There are no 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

| Eye contact | : Not applicable. |
|--------------|-------------------|
| Inhalation | : Not applicable. |
| Skin contact | : Not applicable. |
| Ingestion | : Not applicable. |

Most important symptoms/effects, acute and delayed

| Potential acute health effec | <u>s</u> | | |
|------------------------------|--|--|--|
| Eye contact | : No known significant effects or critical hazards. | | |
| Inhalation | : No known significant effects or critical hazards. | | |
| Skin contact | : No known significant effects or critical hazards. | | |
| Ingestion | : No known significant effects or critical hazards. | | |
| Over-exposure signs/symptoms | | | |
| Eye contact | : No known significant effects or critical hazards. | | |
| Inhalation | : No known significant effects or critical hazards. | | |
| Skin contact | : No known significant effects or critical hazards. | | |
| Ingestion | : No known significant effects or critical hazards. | | |
| | | | |
| Indication of immediate med | cal attention and special treatment needed, if necessary | | |
| Notoo to physician | None identified | | |

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

| Extinguishing media | |
|---|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : None known. |
| Specific hazards arising from the chemical | : No specific fire or explosion hazard. |



Section 5. Fire-fighting measures

| Hazardous thermal decomposition products | : No specific data. |
|---|---|
| Special protective actions for fire-fighters | : No special measures are required. |
| 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 | | |
|---|---|--|
| For non-emergency personnel | : Put on appropriate personal protective equipment. | |
| For emergency responders | : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". | |
| Environmental precautions | : No special requirements. | |
| | | |

Methods and materials for containment and cleaning up

| Spill | 1 | 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

| Protective measures Advice on general occupational hygiene | | Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. |
|--|---|---|
| Conditions for safe storage, including any incompatibilities | : | Store in accordance with local regulations. Store in sealed container in cool (15-30°C), dry location and away from oxidizers. |

Section 8. Exposure controls/personal protection

| <u>Control parameters</u> | |
|----------------------------------|--|
| United States | |
| Occupational exposure lim | <u>its</u> |
| None. | |
| <u>Canada</u> | |
| Occupational exposure lin | <u>nits</u> |
| None. | |
| Appropriate engineering controls | : No special ventilation requirements. |
| Environmental exposure controls | : No special measures required. |



Section 8. Exposure controls/personal protection

Individual protection measures

| Hygiene measures | : Follow good industrial hygiene practice. |
|-------------------------------|--|
| Eye/face protection | : Not required under normal conditions of use. |
| Skin protection | |
| Hand protection | : Not required under normal conditions of use. |
| Body protection | : Not required under normal conditions of use. |
| Other skin protection | : Not required under normal conditions of use. |
| Respiratory protection | : Not required under normal conditions of use. |

Section 9. Physical and chemical properties

| Section 9. Physical and chemical prope | | |
|--|--------------------|--|
| Appearance | | |
| Physical state | : Liquid. [Clear.] | |
| Color | : Colorless. | |
| Odor | : Odorless. | |
| Odor threshold | : Not available. | |
| рН | : Not available. | |
| Melting point | : Not available. | |
| Boiling point | : Not available. | |
| Flash point | : Not applicable. | |
| Evaporation rate | : Not available. | |
| Flammability (solid, gas) | : Not applicable. | |
| Lower and upper explosive (flammable) limits | : Not applicable. | |
| Vapor pressure | : Not available. | |
| Vapor density | : Not available. | |
| Relative density | : Not available. | |
| Solubility | : Not available. | |
| Partition coefficient: n- octanol/water | : Not available. | |
| Auto-ignition temperature | : Not applicable. | |
| | | |

Decomposition temperature: Not applicable.Viscosity: Not available.Volatility: Not available.

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|--|
| 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 | : Reactive or incompatible with the following materials: oxidizing materials. |
| | |



xMAP[®] Sheath Fluid Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should products not be produced. Section 11. Toxicological information Information on the likely : Not available. Short term exposure **Potential immediate** : No known significant effects or critical hazards. effects **Potential delayed effects** : No known significant effects or critical hazards. Long term exposure **Potential immediate** : No known significant effects or critical hazards. effects

Section 10. Stability and reactivity

| 1 | nformation on toxicological effects |
|---|--|
| | Acute toxicity |
| | There is no data available. |
| | Irritation/Corrosion |
| | There is no data available. |
| | Sensitization |
| | There is no data available. |
| | Carcinogenicity |
| | There is no data available. |
| | Specific target organ toxicity (single exposure) |
| | |

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

routes of exposure

Potential acute health effects

Potential delayed effects

Potential chronic health effects

| Eye contact | : No known significant effects or critical hazards. |
|--------------|---|
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| Eye contact | : No known significant effects or critical hazards. |
|--------------|---|
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |

Delayed and immediate effects and also chronic effects from short and long term exposure

: No known significant effects or critical hazards.



Section 11. Toxicological information

| : No known significant effects or critical hazards. |
|---|
| : No known significant effects or critical hazards. |
| : No known significant effects or critical hazards. |
| : No known significant effects or critical hazards. |
| : No known significant effects or critical hazards. |
| : No known significant effects or critical hazards. |
| |

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available. <u>Mobility in soil</u> <u>Soil/water partition</u> : Not available. <u>coefficient (Koc)</u>

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

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

Section 14. Transport information

| | DOT | TDG | IMDG | ΙΑΤΑ |
|-------------------------------|----------------|----------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - | - |
| Transport hazard class(es) | - | - | - | - |
| Packing group | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. |
| | | | | |



| Section 14. Transport information | | | |
|-----------------------------------|--|--|--|
| | | | |
| Not applicable. | | | |
| ć | | | |

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

| 0 | 5 | |
|---|--|-----|
| U.S. Federal regulations | : United States inventory (TSCA 8b): All components are listed or exempted | d. |
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | : Not listed | |
| Clean Air Act Section 602 Class I Substances | : Not listed | |
| Clean Air Act Section 602 Class II Substances | : Not listed | |
| DEA List I Chemicals (Precursor Chemicals) | : Not listed | |
| DEA List I Chemicals (Precursor Chemicals) | : Not listed | |
| SARA 302/304 | | |
| Composition/information | on ingredients | |
| No products were found. | | |
| SARA 304 RQ | : Not applicable. | |
| <u>SARA 311/312</u> | | |
| Classification | : Not applicable. | |
| <u>SARA 313</u> | | |
| No products were found. | | |
| State regulations | | |
| Massachusetts | : None of the components are listed. | |
| New York | : None of the components are listed. | |
| New Jersey | : None of the components are listed. | |
| Pennsylvania | : None of the components are listed. | |
| California Prop. 65 | | |
| No products were found. | | |
| <u>Canada</u> | | |
| Canadian lists | | |
| Canadian NPRI | : None of the components are listed. | |
| CEPA Toxic substances | : None of the components are listed. | |
| Canada inventory | : All components are listed or exempted. | |
| KMK Regulatory Services | Document No.: 89-40000-00-001 Rev. L | 7/8 |

Section 16. Other information

| <u>History</u> | |
|--------------------------|--------------------------------|
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| Version | : 5 |
| Prepared by | : KMK Regulatory Services Inc. |

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.

