## Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>[D-Asp3]-Microcystin-LR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>M3408</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>desmethyl microcystin LR, Asp3-MCLR</td>
</tr>
<tr>
<td>Supplier</td>
<td>LKT Laboratories, Inc</td>
</tr>
<tr>
<td></td>
<td>545 Phalen Blvd.</td>
</tr>
<tr>
<td></td>
<td>St. Paul, MN 55130 USA</td>
</tr>
<tr>
<td></td>
<td>Ph: 651-644-8424 Fax: 651-644-8357</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.lktlabs.com">www.lktlabs.com</a> - <a href="mailto:getinfo@lktlabs.com">getinfo@lktlabs.com</a></td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

## Section 2. Hazards Identification

**GHS Classification**
- Acute toxicity, Oral (Category 1) H300
- Acute toxicity, Skin (Category 1) H310
- Acute toxicity, Inhalation (Category 1) H330
- Causes skin irritation (Skin Irrit. 2) H315
- May cause an allergic skin reaction (Skin Sens. 1) H317
- Causes serious eye irritation (Eye Irrit. 2) H319
- May cause respiratory irritation (STOT SE3) H335

**GHS Label elements including precautionary statements**

- **Pictogram:**
  - ![](image)
- **Signal word:** Danger
- **Hazard and precautionary statements**
  - **Hazard statements**
    - H300 - Fatal if swallowed.
    - H310 - Fatal in contact with skin.
    - H330 - Fatal if inhaled.
    - H315 - Causes skin irritation.
    - H319 - Causes serious eye irritation.
    - H317 - May cause an allergic skin reaction.
    - H335 - May cause respiratory irritation.
  - **Precautionary statements**
    - P260 - Do not breath dust, fume, gas, mist, vapors and spray.
    - P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
    - P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    - P310 - Immediately call a POISON CENTER or doctor/physician.
    - P320 - Specific treatment is urgent.
    - P361 - Remove/Take off immediately all contaminated clothing.
    - P405 - Store locked up.
    - P501 - Dispose of contents/container in accordance with local, regional, national and international orders.

**HMIS Classification**
- Health hazard: 4
- Flammability: 0
- Physical hazard: 0

**NFPA Rating**
- Health hazard: 4
- Fire hazard: 0
- Reactivity hazard: 0

**Potential Health Effects**
- Inhalation: Acute toxicity. Fatal if inhaled. May cause respiratory tract irritation.
- Skin: Acute toxicity. Fatal in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Eyes: Causes serious eye irritation.
Ingestion: Acute toxicity: Fatal if swallowed.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>CAS No.</th>
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<tr>
<td></td>
<td>C48H72N10O12</td>
<td>120011-66-7</td>
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<tr>
<td></td>
<td>981.2</td>
<td>EC No.</td>
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</table>
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.

PERSONAL PROTECTION
Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

Section 9. Physical and Chemical Properties

<table>
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<tr>
<th>Physical State</th>
<th>Color</th>
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<tbody>
<tr>
<td>Clear Film</td>
<td>Colorless</td>
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</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
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</table>

<table>
<thead>
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<th>Melting Point</th>
<th>Density</th>
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</table>

<table>
<thead>
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<th>Solubility</th>
<th>pH</th>
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</table>

<table>
<thead>
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<th>Flash Point</th>
<th>Ignition temperature</th>
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</table>

<table>
<thead>
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<th>Lower explosion limit</th>
<th>Autoignition temperature</th>
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<tbody>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Vapor pressure</th>
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<td>Not available.</td>
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<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
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<tbody>
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<td>Characteristic</td>
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<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>Odor Threshold</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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</table>

Section 10. Stability and Reactivity

Stability

Stable. Avoid strong oxidizing agents.

Materials To Avoid

Not available.

Hazardous Decomposition Products

Not available.
Section 11. Toxicological Information

**Oral LD50**  Rat (intraperitoneal) 0.05 mg/kg

**Inhalation LC50**  Not available.

**Dermal LD50**  Danger through skin absorption.

**Other information on acute toxicity**  Not available.

**Skin corrosion/irritation**  Irritant to skin and mucous membranes. Sensitization possible through skin contact. Danger through skin absorption.

**Serious eye damage/irritation**  Irritating effect.

**Respiratory or skin sensitization**  May cause sensitisation by skin contact.

**Germ cell mutagenicity**  Not available.

**Carcinogenicity**
- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity**  Not available.

**Specific organ toxicity single exposure (GHS)**  Not available.

**Specific organ toxicity repeated exposure (GHS)**  Not available.

**Teratogenicity**  Not available.

**Aspiration Hazard**  Not available.

**Synergistic effects**  Not available.

**Additional Information**  Not available.

**Potential Health Effects**
- Inhalation: Acute toxicity. Fatal if inhaled. May cause respiratory tract irritation.
- Skin: Acute toxicity. Fatal in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Eyes: Causes serious eye irritation.
- Ingestion: Acute toxicity: Fatal if swallowed.

Section 12. Ecological Information

**Toxicity**  Not available.

**Mobility in soil**  Not available.

**PBT and vPvB assessment**  Not available.

**Possibility of hazardous reactions**  No dangerous decomposition products known.

**Conditions to avoid**  Not available.
Section 13. Disposal Considerations

Waste Disposal
Dispose of material according to all federal, state and local regulations. Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 14. Transport Information

DOT (US) UN number: 3462 Class: 6.1 Packing group: I
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. ([D-Asp3]-Microcystin-LR)

IATA UN number: 3462 Class: 6.1 Packing group: I
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. ([D-Asp3]-Microcystin-LR)

IMDG UN number: 3462 Class: 6.1 Packing group: I
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. ([D-Asp3]-Microcystin-LR)

Section 15. Regulatory Information

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components Acute health hazard and chronic health hazard.

Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components [D-Asp3]-Microcystin-LR CAS #: 120011-66-7 Revision Date:

New Jersey Right To Know Components [D-Asp3]-Microcystin-LR CAS #: 120011-66-7 Revision Date:

California Prop 65 Components This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.
For emergencies in the USA, call CHEMTREC 800-424-9300