

Safety Data Sheet

Section 1. Product and Company Identification

Product Name Microcystin (N-Me)-LR

Product ID M3410

Chemical Name

MC(N-Me)LR

(Synonyms)

Supplier

LKT Laboratories, Inc

545 Phalen Blvd.

St. Paul, MN 55130 USA

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Emergency Phone #

1-800-424-9300

Section 2. Hazards Identification

GHS Classification

Acute toxicity, Oral (Category 2), H300 Acute toxicity, Skin (Category 2), H310 Skin irritation (Category 2), H315 Skin sensitization (Category 1), H317 Eye irritation (Category 2A), H319 Acute toxicity, Inhalation (Category 1), H330

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements including precautionary statements

Pictogram



Signal word

Danger

Hazard and precautionary statements

Hazard statements

Hazard statements
H300 - Fatal if swallowed.
H310 - Fatal ir swallowed.
H310 - Fatal ir contact with skin.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H330 - Fatal if inhaled.
H330 - Fatal if inhaled.
H331 - May cause respiratory irritation.
Precautionary statements
P260 - Do not breathe dust, fumes, gas, mist, vapors and spray.
P262 - Do not get in eyes, on skin or on clothing.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P284 - Wear respiratory protection.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 - IF ON SKIN: wash with plenty of soap and water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several ministry.

P310 - Immediately call a POISON CENTER or doctor/physician.

P320 - Specific treatment is urgent (see supplemental 1st aid instructions on this label).

P330 - Rinse mouth.

P333 + P313 - IF SKIN irritation occurs: Get medical advice/attention.

P337 + P313 - IF eye irritation persists: Get medical advice/attention.

P338 - Remove contact lenses, if present and easy to do. Continue rinsing.

P350 - Gently wash with plenty of soap and water.

P361 - Remove/Take off immediately all contaminated clothing.

P363 - Wash contaminated clothing before reuse.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents & or container to an approved waste disposal plant.

HMIS Classification Health hazard: 3

Flammability: 0 Physical hazards: 0

NFPA Rating

Health hazard: 3 Fire: 0

Reactivity hazard: 0

Potential Health Effects

Inhalation - Fatal if inhaled. Skin - Fatal in contact with skin. Ingestion - Fatal if swallowed.

Liver - Congeners are selectively transported to the liver resulting in acute liver failure and tumor promotion.

Section 3. Composition/Information on Ingredients

Substances Ingredient: Title Compound Percent: 100

Formula Formula Wt. 1009.3 $C_{50}H_{76}N_{10}O_{12}$

1865776-22-2 CAS No. EC No.

Section 4. First Aid Measues

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Flush eyes with water for at few minutes. If contacts are present, remove and continue to flush eyes for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

Eye Contact

Wash off with soap and plenty of water for at least 15 minutes. Take victim immediately to hospital. Consult a physician. Be sure to remove the contaminated clothing and shoes and wash before wearing again.

Skin Contact

Inhalation

If breathed in, move person into fresh air. If breathing becomes difficult, give oxygen and consult a physician. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult the local poison center and physician.

Section 5 . Firefighting Measures

Not available.

Flash Point

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extingushing Media

Wear self-contained breathing apparatus for fire fighting and full protective clothing to prevent contact with skin and

eves.

Unusual Fire Hazards

Firefighting Procedures

Hazardous decomposition product formed under fire conditions. Carbon oxides, nitrogen oxides (NOx). It may

emit toxic gases.

Section 6. Accidental Release Measures

Personal Precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Wear chemical resistant gloves, boots and goggles for clean up. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Wash spill site and ventilate area after material pickup is complete.

Section 7. Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Material is highly toxic. Avoid prolonged or repeated exposure. Wash thoroughly after handling material.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).

Material is highly toxic.

Other Remarks

Section 8. Exposure Controls/Personal Protection

Personal protective EXPOSURE CONTROLS

equipment Contains no substances with occupational exposure limit values.

General industrial hygiene and safety practice.
PERSONAL PROTECTION

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

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching love'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

Respiratory protection: Wear suitable protective clothing. Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace.

Respiratory protection: Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Handle in a chemical fume hood with adequate ventilation.

Section 9. Physical and Chemical Properties						
Physical State	Clear film	Color	Colorless			
Boiling Point	Not available.	Volatility	Not available.			
Melting Point	Not available.	Density	Not available.			
Solubility	Soluble in Methanol and Dimethyl sulfoxide.	рН	Not available.			
Flash Point	Not available.	Ignition temperature	Not available.			
Lower explosion limit	Not available.	Autoignition temperature	Not available.			
Upper explosion limit	Not available.	Vapor pressure	Not available.			
Water solubility	Not available.	Odor	Not available.			
Partition coefficient: n-octanol/water	Not available.	Odor Threshold	Not available.			
Relative vapor density	Not available.	Evaporation rate	Not available.			

Section 10. Stability and Reactivity

	Stable under	recommenaea	storage	conditions.
Stability			J	

Avoid contact with strong oxidizing agents. Avoid use of Dimethyl sulfoxide (DMSO) because of its ability to carry Materials To Avoid toxic materials across membranes.

Hazardous Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx). Decomposition Products

Conditions to avoid

Section 11. Toxicological Information

Oral LD50 Fatal if swallowed. Skin Causes skin irritation.

corrosion/irritation

Serious eye Causes serious eye irritation. Inhalation LC50 Fatal if inhaled.

damage/irritation

Respiratory or May cause allergic skin reaction. May cause skin sensitization $^{\rm respiratory}$ irritation. Dermal LD50 Fatal in contact with skin.

Other information on Not available.

acute toxicity

Germ cell mutagenicity Not available.

Reproductive Toxicity Not available. Aspiration Hazard Fatal if inhaled.

Specific organ toxicity Not available.

single exposure (GHS)

Synergistic effects Not available

Additional Information Not available. Specific organ toxicity Not available.

repeated exposure (GHS)

Teratogenicity Not available.

Signs and symptoms Not available. of exposure

Potential Inhalation - Fatal if inhaled.

Health Effects Skin - Fatal in contact with skin.
Ingestion - Fatal if swallowed.
Eyes - Causes serious eye irritation.
Liver - Congeners are selectively transported to the liver resulting in acute liver failure and tumor promotion.

Carcinogenicity

Bioaccumulative potential 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

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

UN number: 3462 Class: 6.1 Packing group: I

Proper shipping name: Toxins, extracted from living sources clear film, n.o.s. (Microcystin (N-Me)-LR)

IMDG UN number: 3462 Class: 6.1

UN number: 3462 Class: 6.1 Packing group: I Proper shipping name: TOXINS, EXTRACTED FROM LIVING SOURCES CLEAR FILM, N.O.S. (Microcystin (N-

Me)-LR)

Further Information

Section 15. Regulatory Information

Reach No.

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

SARA 313 Components 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

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

To Know Components

Pennsylvania Right Microcystin (N-Me)-LR CAS: 169789-55-3

To Know Components

New Jersey Right Microcystin (N-Me)-LR CAS: 169789-55-3

To Know Components

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects or any

Components 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.

Updated 10/30/2018

For emergencies in the USA, call CHEMTREC 800-424-9300