

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 2/20/2018 Revision date: 10/23/2023 Supersedes: 7/20/2018 Version: 2.0

### **SECTION 1: Identification**

#### 1.1. Identification

Product form Mixture

Product name MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER

Product code : ULM-10346-S

#### 1.2. Recommended use and restrictions on use

No additional information available

### 1.3. Supplier

Cambridge Isotope Laboratories, Inc.

50 Frontage Rd

01810

ANDOVER, MA, 01810

USA

T 1-800-322-1174

cilsales@isotope.com - www.isotope.com

### 1.4. Emergency telephone number

: 1-703-741-5970 **Emergency number** 

Chemtrec 1-800-424-9300 24 hours

## **SECTION 2: Hazard(s) identification**

### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 3	H301	Toxic if swallowed
Acute toxicity (dermal) Category 3	H311	Toxic in contact with skin
Acute toxicity (inhalation:vapor) Category 3	H331	Toxic if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity (single exposure) Category 1	H370	Causes damage to organs (eyes, kidneys, liver, heart, central
		nervous system) (Dermal, Inhalation, oral)

Full text of H statements : see section 16

## 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)







Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation

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Precautionary statements (GHS US)

- H370 Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral)
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking, heat, open flames, sparks
  - P233 Keep container tightly closed.
  - P240 Ground/Bond container and receiving equipment.
  - P241 Use explosion-proof electrical, lighting, ventilating equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - P260 Do not breathe dust, fume, mist, gas, spray, vapors.
  - P261 Avoid breathing dust, fume, gas, spray, vapors, mist.
  - P264 Wash hands, forearms and face thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P271 Use only outdoors or in a well-ventilated area.
  - P280 Wear protective clothing, protective gloves.
  - P301+P310 If swallowed: Immediately call a doctor, a POISON CENTER.
  - P302+P352 If on skin: Wash with plenty of water.
  - P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
  - contact lenses, if present and easy to do. Continue rinsing.
  - P307+P311 If exposed: Call a poison center/doctor.
  - P311 Call a doctor, a POISON CENTER.
  - P312 Call a doctor, a POISON CENTER if you feel unwell.
  - P321 Specific treatment (see Hazardous component(s) for labeling on this label).
  - P322 Specific treatment (see Hazard pictograms (CLP) on this label)
  - P330 Rinse mouth.
  - P332+P313 If skin irritation occurs: Get medical advice/attention.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
- P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
WATER UNLABELED	CAS-No.: 7732-18-5	55.8341	Not classified

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Name	Product identifier	%	GHS US classification
100% METHANOL UNLABELED	CAS-No.: 67-56-1	44.1648	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370
MICROCYSTIN-LA UNLABELED	CAS-No.: 96180-79-9	0.0011	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335

Full text of hazard classes and H-statements: see section 16

### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand. Call a physician immediately. Evacuate danger area.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Call a doctor.

First-aid measures after skin contact : Rinse skin with water/shower. Take immediately victim to hospital. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Call a physician immediately.

## 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as quaranteeing any specific property of the product. Effects due to Ingestion may

the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach.

Symptoms/effects : Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowed.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Dry sand.

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Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing. Wear recommended personal protective equipment.

Other information : Use water spray to cool exposed surfaces.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Do not breathe dust, mist, gas, spray, vapors, fume. Avoid contact

with skin, eyes and clothing. Ventilate spillage area. Remove all sources of ignition. No open flames, no sparks, and no smoking. Ensure adequate air ventilation. Special attention should be

given to low areas/pits where flammable vapors can accumulate.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Dike and contain spill. For large spills, confine the spill in a dike and charge it with wet sand or

earth for subsequent safe disposal. Small quantities of liquid spill: take up in non-combustible

absorbent material and shovel into container for disposal.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters. This material and its container must be disposed of in a safe way, and as per local

legislation.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground/bond container and receiving equipment. Use only non-sparking tools. Take

precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust, fume, gas, spray, vapors, mist. Do not get in eyes, on skin, or on clothing. Use only

outdoors or in a well-ventilated area.

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke

when using this product. Always wash hands after handling the product.

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## 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container

tightly closed. Store locked up.

Storage conditions : Store in freezer (-20°C). Protect from light.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER			
USA - ACGIH - Occupational Exposure Limits			
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)		
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)		
Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.		
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.		
USA - ACGIH - Biological Exposure Indices			
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)		
Remark	End of shift (As soon as possible after exposure ceases)		
USA - OSHA - Occupational Exposure Limits			
OSHA PEL TWA [1]	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
OSHA PEL TWA [2]	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
OSHA PEL STEL [2]	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.		
USA - NIOSH - Occupational Exposure Limits			
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits		
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits		
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits		
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits		
Remark (NIOSH)	Potential for dermal absorption.		
WATER UNLABELED (7732-18-5)			
USA - ACGIH - Occupational Exposure Limits	USA - ACGIH - Occupational Exposure Limits		
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.		

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100% METHANOL UNLABELED (67-56-1)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)	
Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.	
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)	
Remark	End of shift (As soon as possible after exposure ceases)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA [1]	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL TWA [2]	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL STEL [2]	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits	
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits	
Remark (NIOSH)	Potential for dermal absorption.	
MICROCYSTIN-LA UNLABELED (96180-79-9)		
No additional information available		

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.

#### Materials for protective clothing:

Wear suitable protective clothing and gloves

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#### Hand protection:

Wear suitable protective clothing and gloves

#### Eye protection:

Wear eye protection. Chemical goggles or face shield with safety glasses

#### Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator

#### Personal protective equipment symbol(s):









### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : Colorless

Odor : Mixture contains one or more component(s) which have the following odour:

: No data available

Odor threshold : No data available No data available pН Melting point No data available Freezing point No data available : No data available Boiling point Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapor density at 20°C : No data available : No data available Relative density : No data available Solubility Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available Decomposition temperature No data available No data available Viscosity, kinematic : No data available Viscosity, dynamic **Explosion limits** : No data available : No data available Explosive properties

#### 9.2. Other information

Oxidizing properties

No additional information available

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### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapors may form flammable mixture with air. Highly flammable liquid and vapor.

#### 10.2. Chemical stability

Product is stable in unopened container until retest/review date, if stored as recommended.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Acid anhydrides. Acid chlorides. Oxidizing agent. Alkali Metal Amides. Reducing agents. Acids.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

ATE US (vapors)

#### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Toxic if swallowed.

Acute toxicity (dermal) : Toxic in contact with skin.

Acute toxicity (inhalation) : Toxic if inhaled.

Acute toxicity (innaiation)	Toxic if innaled.	
MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	17.1 mg/kg body weight	
ATE US (vapors)	3 mg/l/4h	
ATE US (dust, mist)	128.2 mg/l/4h	
Additional data	LDLO, oral, human: 143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
100% METHANOL UNLABELED (67-56-1)		
LD50 oral rat	1187 – 2769 mg/kg	
LD50 dermal rabbit	17100 mg/kg	
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h	
ATE US (oral)	100 mg/kg body weight	
ATE US (dermal)	300 mg/kg body weight	

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3 mg/l/4h

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100% METHANOL UNLABELED (67-56-1)		
ATE US (dust, mist)	128.2 mg/l/4h	
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
MICROCYSTIN-LA UNLABELED (96180-79-9	)	
ATE US (oral)	5 mg/kg body weight	
ATE US (dermal)	50 mg/kg body weight	
ATE US (gases)	10 ppmV/4h	
ATE US (vapors)	0.05 mg/l/4h	
ATE US (dust, mist)	0.005 mg/l/4h	
Additional information	LD50 Intraperitoneal (rat): 122 µg/kg	
Skin corrosion/irritation	: Causes skin irritation.	
WATER UNLABELED (7732-18-5)		
рН	6 – 8 at 25 °C (77 °F)	
Serious eye damage/irritation	: Causes serious eye irritation.	
WATER UNLABELED (7732-18-5)		
рН	6 – 8 at 25 °C (77 °F)	
Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity	: Not classified : Not classified : Not classified	
MICROCYSTIN-LA UNLABELED 10 UG/ML I	N 1:1 METHANOL:WATER	
National Toxicology Program (NTP) Status	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.	
100% METHANOL UNLABELED (67-56-1)		
National Toxicology Program (NTP) Status	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).	
100% METHANOL UNLABELED (67-56-1)		
STOT-single exposure	Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).	
MICROCYSTIN-LA UNLABELED (96180-79-9		
STOT-single exposure	May cause respiratory irritation.	
' '	: Not classified	
Aspiration hazard Viscosity, kinematic	: Not classified : No data available	
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach.	
Symptoms/effects	: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).	

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Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowed.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 - Crustacea [2]	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	
100% METHANOL UNLABELED (67-56-1)		
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 - Crustacea [2]	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	

## 12.2. Persistence and degradability

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
Biochemical oxygen demand (BOD)	600 – 1200 mg/g	
Chemical oxygen demand (COD)	1420 mg/g	
ThOD	1500 mg/g	
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d	
100% METHANOL UNLABELED (67-56-1)		
Biochemical oxygen demand (BOD)	600 – 1200 mg/g	
Chemical oxygen demand (COD)	1420 mg/g	
ThOD	1500 mg/g	
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d	

## 12.3. Bioaccumulative potential

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
BCF - Fish [1]	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C	
Bioconcentration factor (BCF REACH)	1	
100% METHANOL UNLABELED (67-56-1)		
BCF - Fish [1]	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C	
Bioconcentration factor (BCF REACH)	1	

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100% METHANOL UNLABELED (67-56-1)	
Partition coefficient n-octanol/water (Log Pow)	-0.77

### 12.4. Mobility in soil

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER	
Ecology - soil Not degradable in the soil.	
100% METHANOL UNLABELED (67-56-1)	
Ecology - soil Not degradable in the soil.	

### 12.5. Other adverse effects

Other adverse effects	: Avoid release to the environment. Disposal must be done according to official regulations.
Other information	: Stability in water: at 19 °C - (83 - 91%) - 72 h. Remarks: Hydrolyses on contact with water.
	Hydrolyses readily.

## **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local $$
	environmental control regulations.

Product/Packaging disposal recommendations

: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials

: Dispose of as unused product.

## **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

### 14.1. UN number

: UN1230 DOT NA No UN-No. (TDG) : UN1230 UN-No. (IMDG) : 1230 UN-No. (IATA) : 1230

## 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol METHANOL Proper Shipping Name (TDG) Proper Shipping Name (IMDG) METHANOL Proper Shipping Name (IATA) Methanol

## 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 3 (6.1) Hazard labels (DOT) : 3, 6.1



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#### TDG

Transport hazard class(es) (TDG) : 3 (6.1) Hazard labels (TDG) : 3, 6.1



#### **IMDG**

Transport hazard class(es) (IMDG) : 3 (6.1) Hazard labels (IMDG) : 3, 6.1



#### IATA

Transport hazard class(es) (IATA) : 3 (6.1) Hazard labels (IATA) : 3, 6.1



#### 14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

### DOT

UN-No.(DOT) : UN1230

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite

(31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59)

F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 1 L

CFR 173.27)

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DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

: 60 I

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

**TDG** 

UN-No. (TDG) : UN1230

TDG Special Provisions : 43 - Despite section 2.1 of Part 2 (Classification), these dangerous goods are assigned to this

classification based on human experience.

Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 1 L
Carrying Railway Vehicle Index

Emergency Response Guide (ERG) Number : 131

**IMDG** 

Special provision (IMDG) : 279
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Flash point (IMDG) : 12°C c.c.

Properties and observations (IMDG) : Colourless, volatile liquid. Flashpoint: 12°C c.c. Explosive limits: 6% to 36.5% Miscible with

water. Toxic if swallowed; may cause blindness. Avoid skin contact.

MFAG-No : 131

**IATA** 

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) 352 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) 364 CAO max net quantity (IATA) 60L : A113 Special provision (IATA) ERG code (IATA) : 3L

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER

Subject to reporting requirements of United States SARA Section 313

10/23/2023 (Revision date) US - en 13/16

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MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
CERCLA RQ	5000 lb	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard	

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
WATER UNLABELED	7732-18-5	Not present	-	
100% METHANOL UNLABELED	67-56-1	Present	Active	
MICROCYSTIN-LA UNLABELED	96180-79-9	Not present	-	

WATER UNLABELED (7732-18-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

100% METHANOL UNLABELED (67-56-1)	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

MICROCYSTIN-LA UNLABELED (96180-79-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

## 15.2. International regulations

#### **CANADA**

## MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER

Listed on the Canadian DSL (Domestic Substances List)

## **WATER UNLABELED (7732-18-5)**

Listed on the Canadian DSL (Domestic Substances List)

### **100% METHANOL UNLABELED (67-56-1)**

Listed on the Canadian DSL (Domestic Substances List)

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#### **MICROCYSTIN-LA UNLABELED (96180-79-9)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

### 15.3. US State regulations

MICROCYSTIN-LA UNLABELED 10 UG/ML IN 1:1 METHANOL:WATER		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	Yes	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

100% METHANOL UNLABELED (67-56-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		

Component	State or local regulations
WATER UNLABELED(7732-18-5)	U.S Pennsylvania - RTK (Right to Know) List; U.S New Jersey - Right to Know Hazardous Substance List
100% METHANOL UNLABELED(67-56-1)	U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List; U.S New Jersey - Right to Know Hazardous Substance List

## **SECTION 16: Other information**

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Revision date : 10/23/2023

Other information : This product is not radioactive. The data given for this product are those of the corresponding

unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the

corresponding unlabeled compound.

#### Full text of H-phrases

H225 Highly flammable liquid and vapor

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Full text of I	Full text of H-phrases		
H300	Fatal if swallowed		
H301	Toxic if swallowed		
H310	Fatal in contact with skin		
H311	Toxic in contact with skin		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H319	Causes serious eye irritation		
H330	Fatal if inhaled		
H331	Toxic if inhaled		
H335	May cause respiratory irritation		
H370	Causes damage to organs		

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.