

# Safety Data Sheet

## Safety Data Sheet - LC Laboratories Revision Date: July 1, 2019

### SECTION 1. IDENTIFICATION:

Trade name: Leptomycin B  
Product Number: [L-6100](#)  
Manufacturer/Supplier:  
LC Laboratories  
165 New Boston Street  
Woburn, MA 01801 USA  
+1-781-937-0777 Fax: +1-781-938-5420

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### SECTION 2. HAZARD(S) IDENTIFICATION:

Hazard Description: Harmful  
Substance Class Identifier (refers to Leptomycin B): Drug; Mutagen  
Substance Class Identifier (refers to Ethanol): Tumorigen; Drug; Mutagen; Natural Product;  
Human Data; Primary Irritant; Reproductive Effector  
May be harmful if swallowed, inhaled, or absorbed through the skin  
Exposure may also cause the following: damage to fertility and/or newborn and breastfed infants; general anesthesia, coma, hallucinations/distorted perceptions, arrhythmia, nausea, and vomiting  
Exposure may cause irritation to eyes, mucous membranes upper respiratory tract and skin  
Signal Word: Danger  
H302+312+332 - Harmful if swallowed, in contact with skin or if inhaled  
**GHS Precautionary Statements:**  
P2562 - Do not get in eyes, on skin or on clothing  
WARNING: For Laboratory Research Use Only



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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name: (2E,5S,6R,7S,9R,10E,12E,15R,16Z,18E)-19-[(2S,3S)-3,6-Dihydro-3-methyl-6-oxo-2H-pyran-2-yl]-17-ethyl-6-hydroxy-3,5,7,9,11,15-hexamethyl-8-oxo-2,10,12,16,18-nonadecapentaenoic acid  
Synonyms: LMB, Elactocin, CI-940, CL-1957A, Mantuamycin, NSC-364372, PD-114720  
Hazardous Ingredient: Leptomycin B, Ethanol  
CAS Registry Number: 87081-35-4 (Leptomycin B); 64-17-5 (Ethanol)  
Molecular Weight: 540.73  
Molecular Formula: C<sub>33</sub>H<sub>48</sub>O<sub>6</sub>

#### **SECTION 4. FIRST-AID MEASURES:**

After Inhalation: If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration

After skin contact: flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

After eye contact: flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing: if swallowed, wash out mouth with copious amounts of water; call a physician

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#### **SECTION 5. FIRE-FIGHTING MEASURES:**

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam

Protective equipment: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

Unusual fire hazard: may emit toxic fumes under fire conditions

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#### **SECTION 6. ACCIDENTAL RELEASE MEASURES:**

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves

Measures for cleaning/collecting: absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13

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#### **SECTION 7. HANDLING AND STORAGE:**

Information for safe handling: avoid contact with skin, eyes and clothing; material may be an irritant

Storage: store solid and solutions at -20 °C

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#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator

Protection of hands: handle with Nitrile rubber gloves with minimum thickness of 0.11 mm (4.3 mil). This recommendation should not be interpreted as offering an approval for any specific use conditions. Please review this recommendation with a safety officer to evaluate if it is appropriate for the anticipated use.

Eye protection: chemical safety goggles

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#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:**

Form: solution in absolute ethanol

Color: clear

Odor:

Melting point/Melting range:

Danger of explosion:

Solubility in / Miscibility with water: not soluble

Solvent content:

Organic solvents: soluble in ethanol and methanol

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### **SECTION 10. STABILITY AND REACTIVITY:**

Stability: avoid acids and bases

Thermal decomposition / conditions to be avoided: protect from light and heat

Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide and carbon dioxide

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### **SECTION 11. TOXICOLOGICAL INFORMATION:**

RTECS #: RA5390000 (Leptomycin B)

Acute toxicity (Leptomycin B): intravenous toxicity (LD50): 3.1 mg/kg (mouse)

On the skin: may be an irritant; may be harmful if absorbed through the skin

On the eye: may be an irritant

Inhalation: may be harmful if inhaled; may be irritating to mucous membranes and upper respiratory tract

Ingestion: may be harmful if swallowed

RTECS #: KQ6300000 (Ethanol)

Acute toxicity (Ethanol): Oral toxicity (LD50): 3450 mg/kg (mouse), 7000-7060 mg/kg (rat); intraperitoneal toxicity (LD50): 528 mg/kg (mouse), 3600 mg/kg (rat), 963 mg/kg (rabbit), 3414 mg/kg (guinea pig), 5068 mg/kg (hamster);

intravenous toxicity (LD50): 1973 mg/kg (mouse), 1440 mg/kg (rat), 2374 mg/kg (rabbit); subcutaneous toxicity (LD50): 8285 mg/kg (mouse); intrarterial toxicity (LD50): 11 mg/kg (rat)

On the skin: may cause skin irritation; may be harmful if absorbed through the skin

On the eye: may cause eye irritation

Inhalation: may be harmful if inhaled; may be irritating to mucous membranes and upper respiratory tract

Ingestion: may be harmful if swallowed

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### **SECTION 12. ECOLOGICAL INFORMATION:**

General notes: no data available

Treat as potentially toxic if released into the environment

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### **SECTION 13. DISPOSAL CONSIDERATIONS:**

Dispose of in accordance with prevailing country, federal, state and local regulations

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**SECTION 14. TRANSPORT INFORMATION:**

UN number: 1170

DOT: Ethanol Solution, Class: 3, Packing group: II

IMDG: Ethanol Solution, Class: 3, Packing group: II

IATA: Ethanol Solution, Class: 3, Packing group: II

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**SECTION 15. REGULATORY INFORMATION:**

Code letter and hazard designation of product:

EU Risk And Safety phrases:

S7: Keep container tightly closed

S9: Keep container in a well ventilated place

S16: Keep away from sources of ignition - no smoking

S24/25: Avoid contact with skin and eyes

S36/37/39: Wear suitable protective clothing, gloves, and eye/face protection

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

R11: Highly flammable

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed

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**SECTION 16. OTHER INFORMATION:**

The above information is believed to be correct based on our present knowledge but does not purport to be complete. For research use only by trained personnel. The burden of safe use of this material rests entirely with the user. LC Laboratories disclaims all liability for any damage resulting from use of this material.

Reviewed: July 1, 2019