

Leptomycin B, Free Acid: sc-202210



The Power to Question

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name:	Leptomycin B, Free Acid	Emergency: ChemWatch Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112
Catalog Number:	sc-202210	
Supplier:	Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800	
Synonyms:	19-[(2S,3S)-3,6-dihydro-3-methyl-6-oxo-2H-pyran-2-yl]-17-ethyl-6-hydroxy-3,5S,7S,9R,11,15R, hexamethyl-8-oxo-2E,10E,12E,16Z,18E-nonadecapentaenoic acid; Elactocin; LMB; Mantuamycin; NSC 364372;	

2. Hazards Identification

Emergency Overview:	Highly Flammable. Avoid contact and inhalation. Target Organ(s): blood, central nervous system, eyes, liver, reproductive system, respiratory system, skin. The hazards identified with this product are those associated with the solvent(s).
Route(s) of Entry:	Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection
Potential Health Effects (Acute and Chronic):	Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation.
LD 50 / LC 50:	Please refer to Section 11.
Signs and Symptoms Of Exposure:	Irritating to eyes, skin, nose; may cause headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects. To the best of our knowledge, the toxicological properties have not been thoroughly investigated.
Medical Conditions Generally Aggravated By Exposure:	No data available.

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #
1. Leptomycin B	87081-35-4	0.1 %	617-954-4		NA
2. Ethyl alcohol	64-17-5	99.9 %	200-578-6	R11	KQ6300000

4. First Aid Measures

Emergency and First Aid Procedures:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel. In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel. In case of skin contact, immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
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5. Fire Fighting Measures

Flash Pt:	14.00 C Method Used: Closed Cup
Explosive Limits:	LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C
Autoignition Pt:	363.00 C

Fire Fighting Instructions:	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. Note: Flammable as diluted in ethanol.
Flammable Properties and Hazards:	Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions. Sensitive to static discharge. Vapors can travel to a source of ignition and flash back.
Hazardous Combustion Products:	No data available.
Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
Unsuitable Extinguishing Media:	A solid water stream may be inefficient.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:	Avoid release into the environment. Avoid breathing vapors and provide adequate ventilation. Remove all sources of ignition. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
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7. Handling and Storage

Hazard Label Information:	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling
Precautions To Be Taken in Handling:	Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated exposure. Keep away from sources of ignition. Prevent the build up of electrostatic charge.
Precautions To Be Taken in Storing:	Keep away from heat, sparks, and flame. Keep tightly closed. Store, as supplied, at -20° C for up to 1 year. Store solutions at -20° C for up to 3 months.
Other Precautions:	Hygroscopic.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Leptomycin B	87081-35-4	No data.	No data.	No data.
2. Ethyl alcohol	64-17-5	1000 ppm	1000 ppm	No data.

Protective Equipment Summary - Hazard Label Information:	Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood
Respiratory Equipment (Specify Type):	NIOSH approved respirator, as conditions warrant.
Eye Protection:	Safety glasses
Protective Gloves:	Compatible chemical-resistant gloves
Other Protective Clothing:	Lab coat
Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Work/Hygienic/Maintenance Practices:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	☐ Gas ☒ Liquid ☐ Solid
Melting Point:	No data.

Boiling Point: No data.

Autoignition Pt: 363.00 C

Flash Pt: 14.00 C Method Used: Closed Cup

Explosive Limits: LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C

Specific Gravity (Water = 1): No data.

Vapor Pressure (vs. Air or mm Hg): 43 MM_HG at 20.0 C

Vapor Density (vs. Air = 1): No data.

Evaporation Rate (vs Butyl Acetate=1): No data.

Solubility in Water: No data.

Percent Volatile: No data.

Formula: C33H48O6

Molecular Weight: 540.70

Appearance and Odor: No data available.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: heat, flames and sparks

Incompatibility - Materials To Avoid: alkali metals
ammonia
peroxides
strong oxidizing agents

Hazardous Decomposition Or Byproducts: carbon dioxide
carbon monoxide

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

The toxicological effects of this product have not been thoroughly studied.

Ethanol - Toxicity Data: Oral LD50 (rat): 7,060 mg/kg; Inhalation LC50 (rat): 20,000 ppm (10h);
Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit) 20mg (24h) moderate;

Chronic Toxicological Effects: Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.
See actual entry in RTECS for complete information.
Ethanol RTECS Number: KQ6300000

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Leptomycin B	87081-35-4	n.a.	n.a.	n.a.	n.a.
Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
2. Ethyl alcohol	64-17-5	n.a.	n.a.	A4	n.a.

12. Ecological Information

Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Ethyl Alcohol Solution

DOT Hazard Class: 3

DOT Hazard Label: FLAMMABLE LIQUID

UN/NA Number: 1170

Packing Group: II

LAND TRANSPORT (European ADR/RID)

ADR/RID Shipping Name Ethyl Alcohol Solution

UN Number: 1170

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: II

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Ethyl Alcohol Solution

UN Number: 1170

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group: II

IATA Classification: 3

Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

European Community Hazard Symbol codes F: Highly Flammable

European Community Risk and Safety Phrases

- R11 - Highly flammable.
- S7 - Keep container tightly closed.
- S16 - Keep away from sources of ignition.
- S24/25 - Avoid contact with skin and eyes.
- S37/39 - Wear suitable gloves and eye/face protection.

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Leptomycin B	87081-35-4	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Leptomycin B	87081-35-4	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	Inventory	No

16. Other Information

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.