

Safety Data Sheet (SDS) According to the REACH Regulation (EC) No. 1907/2006

Issuing Date: 2012-07-27

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Version: 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product No 9676
Product name Leptomycin B

Contains

Chemical name	Index No.	CAS No
ethanol (>99)	603-002-00-5	64-17-5
2,10,12,16,18-Nonadecapentanoic acid, 19-(3,6-dihydro-3-methyl-6-oxo-2H-pyran-2-yl)-17 -ethyl-6-hydroxy-3,5,7,9,11,15-hexamethyl-8-oxo- (0.1 - 1)	Not Listed	87081-35-4
Other means of identification	9676S	

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

1.3. Details of the supplier of the safety data sheet

Importer	Manufacturer
Cell Signaling Technology Europe B.V. Dellaertweg 9b 2316 WZ Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0019	Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 United States TEL: +1 978 867 2300 FAX: +1 978 867 2400

Website www.cellsignal.com
E-mail Address info@cellsignal.eu

1.4. Emergency telephone number

CHEMTREC 24 hours a day, 7 days a week, 365 days a year
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Flammable liquids	Category 2 - (H225)
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2.2. Label elements



Signal word

Danger

Hazard statement(s)

H225 - Highly flammable liquid and vapor.

Precautionary statement(s)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P403 + P235 - Store in a well-ventilated place. Keep cool.

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

2.3. Other hazards

No information available.

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
ethanol	64-17-5	>99	200-578-6	Flam. Liq. 2 (H225)	no data available

For the full text of the R-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.

Inhalation

Move to fresh air.

Skin contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, call a physician.
Ingestion Clean mouth with water and afterwards drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritating to eyes and skin.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Water spray
Carbon dioxide (CO₂)
Alcohol-resistant foam
Dry chemical
Unsuitable Extinguishing Media No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products Carbon oxides (COx)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Remove all sources of ignition. Heat, flames and sparks. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment.
For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation. Avoid breathing vapors or mists.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values					
Chemical name	European Union	United Kingdom	France	Spain	Germany
ethanol		STEL 3000 ppm STEL 5760 mg/m ³ TWA 1000 ppm TWA 1920 mg/m ³	TWA 1000 ppm TWA 1900 mg/m ³ STEL 5000 ppm STEL 9500 mg/m ³	TWA 1000 ppm TWA 1910 mg/m ³	TWA: 500 ppm TWA: 960 mg/m ³ Skin Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m ³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
ethanol		TWA 1000 ppm C(A4)	Huid* STEL 1900 mg/m ³ TWA 260 mg/m ³	TWA 1000 ppm TWA 1900 mg/m ³ STEL 1300 ppm STEL 2500 mg/m ³	TWA 1000 ppm TWA 1900 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
ethanol	STEL 2000 ppm STEL 3800 mg/m ³ TWA 1000 ppm TWA 1900 mg/m ³	SS-C** TWA 500 ppm TWA 960 mg/m ³ STEL 1000 ppm STEL 1920 mg/m ³	TWA 1900 mg/m ³	TWA 500 ppm TWA 950 mg/m ³ STEL 625 ppm STEL 1187.5 mg/m ³	STEL 1000 ppm

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields

Skin protection

Wear protective gloves and protective clothing

Hand protection

Impervious gloves

Other Wear suitable protective clothing.
Respiratory protection In case of inadequate ventilation wear respiratory protection

Environmental Exposure Controls
 No information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid - Clear	
Color	Colorless	
Odor	Alcohol-like odor	
Property	Values	Remarks • Method
pH	No information available	No information available
Melting point/freezing point	No information available	No information available
Boiling point or initial boiling point and boiling range	78 °C	
Flash point	17 °C	Closed cup
Evaporation rate	No information available	No information available
Flammability	No information available	No information available
Upper/lower flammability or explosive limits	-	No information available
Vapor pressure	No information available	No information available
Relative vapor density	No information available	No information available
Density and/or relative density	No information available	No information available
Solubility	No information available.	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available.
Viscosity	No information available	No information available
Explosive properties	No information available	No information available
Oxidizing properties	No information available	No information available

9.2. Other information

Softening point	No information available
Molecular Weight	No information available
Solubility in other solvents	No information available
VOC content	No information available
Liquid Density	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization Hazardous polymerization does not occur.
Hazardous reactions None under normal processing

10.4. Conditions to avoid

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity

10.5. Incompatible materials

Strong oxidizing agents, Peroxides, Ammonia, Alkalis, Bleach.

10.6. Hazardous decomposition products

Carbon oxides (COx)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ethanol	7060 mg/kg (Rat)	-	-

Unknown Acute Toxicity No information available.

Information on likely routes of exposure

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact Contact with eyes may cause irritation.
Skin contact Repeated exposure may cause skin dryness or cracking.
Ingestion May be harmful if swallowed.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritating to eyes and skin.

Skin corrosion/irritation No information available.
Serious eye damage/eye irritation Irritating to eyes.
Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical name	European Union	IARC
ethanol		1

IARC: (International Agency for Research on Cancer) *Group 1 - Carcinogenic to Humans*

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

11.2. Information on other hazards

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ethanol	-	LC50 100 mg/L (Pimephales promelas) 96 h LC50 13400 - 15100 mg/L (Pimephales promelas) 96 h LC50 12.0 - 16.0 mL/L (Oncorhynchus mykiss) 96 h	EC50 2 mg/L (Daphnia magna) 48 h EC50 10800 mg/L (Daphnia magna) 24 h LC50 9268 - 14221 mg/L (Daphnia magna) 48 h

12.2. Persistence and degradability

Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation Does not bioaccumulate.

Chemical name	Octanol-Water Partition Coefficient
ethanol	-0.32

Bioconcentration factor (BCF) 3

12.4. Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Endocrine disrupting properties**12.7. Other adverse effects**

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers may contain flammable or explosive vapours. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG/IMO

14.1 UN number

UN1170

14.2 UN proper shipping name	Ethanol solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

ADR/RID

14.1 UN number	UN1170
14.2 UN proper shipping name	Ethanol solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None

IATA

14.1 UN number	UN1170
14.2 UN proper shipping name	Ethanol solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)**

This product does not contain Substances of Very High Concern (SVHC).

SEVESO Directive Information

P5c - Flammable Liquids [5000 tonnes (Lower-tier) 50,000 tonnes (Upper-tier)]

International inventories

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H225 - Highly flammable liquid and vapor

Classification procedure: Expert judgment and weight of evidence determination.

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Disclaimer

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