

Safety Data Sheet

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

Identification of the substance or mixture

Product code 21335
Product name EZ-Link (tm) Sulfo-NHS-LC-Biotin

Company/undertaking identification

Life Technologies Corporation
5781 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

Thermo Fisher Scientific
Pierce Biotechnology
P.O. Box 117
Rockford, IL 61105
United States
1.815.968.0747 or
1.800.874.3723

24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Within the USA + Canada: 1-800-424-9300 and 1-703-527-3887
Outside the USA + Canada: 1-703-741-5970

Country Specific Emergency Number (if available):

**Use as laboratory reagent
Scientific research and development**

SECTION 2: Hazards identification

GHS Classification

Signal Word

None

Hazard pictograms

None

Revision date 20-Aug-2019
Product code 21335

Page 1 / 10
Product name EZ-Link (tm) Sulfo-NHS-LC-Biotin

Health hazards

Not classified

Physical hazards

Not classified

Environmental hazards

Not classified

Hazard Statements

Not Applicable

Precautionary Statements**Prevention**

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

Not Applicable

HMIS

Health	0
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Component	CAS No.	Common name	EINECS-No	Weight-%
Sulfosuccinimidyl 6-(biotinamido) Hexanoate 127062-22-0 (98-100)	127062-22-0	-	-	98-100
N,N-Dimethylformamide 68-12-2 (<0.01)	68-12-2	-	200-679-5	<0.01
Hexane 110-54-3 (<0.01)	110-54-3	-	203-777-6	<0.01

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Rinse skin with water. Immediate medical attention is not required.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

Not Applicable

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable extinguishing media	No information available.

Special hazards arising from the substance or mixture

Not known

Protective equipment and precautions for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment
Use personal protection equipment
See section 8 for more information

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

Use as laboratory reagent. Scientific research and development.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	None	None	None	None
N,N-Dimethylformamide	10 ppm 30 mg/m ³	None	5 ppm	None
Hexane	500 ppm 1800 mg/m ³	None	50 ppm	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	None	None	None
N,N-Dimethylformamide	8 ppm 24 mg/m ³	None	None
Hexane	None	None	None

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles.

Skin and Body Protection Wear suitable protective clothing.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	powder	
Color	white, off-white	
Odor	No data available	
Odor Threshold	No data	
Molecular Weight	No data	
Melting point / melting range	°C No data	°F No data
Boiling point / boiling range	°C No data	°F No data
Flash point	°C No data	°F No data
Autoignition Temperature	°C No data	°F No data
Decomposition temperature	°C No data	°F No data
Evaporation rate	No data	
Flammability (solid, gas)	No data available	
Upper explosion limit	No data	
Lower explosion limit	No data	
Vapor Pressure	No data	
Vapor density	No data	
Relative density	No data	
Specific gravity	No data	
Solubility	No data available	
Partition coefficient: n-octanol/water	No data available	
Viscosity	No data	
Explosive properties	No data	
Oxidizing properties	No data	

Other information

No data available.

SECTION 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No data available.

SECTION 11: Toxicological information

Information on toxicological effects

To the best of our knowledge, the chemical, physical, biological, and toxicological properties of this product have not been thoroughly investigated.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	No data available	No data available	No data available
N,N-Dimethylformamide	= 2000 mg/kg (Rat) = 2800 mg/kg (Rat)	= 1.500 mg/kg (Rabbit)	4 h - 9 - 15 mg/l (Rat)
Hexane	= 25 g/kg (Rat) = 15000 mg/kg (Rat)	No data available	=48000ppm(Rat)

Principal Routes of Exposure

Acute toxicity	Data are conclusive but insufficient for classification.
Skin corrosion/irritation	Data are conclusive but insufficient for classification
Serious eye damage/irritation	Data are conclusive but insufficient for classification
Respiratory or skin sensitization	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – single exposure	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – repeated exposure	Data are conclusive but insufficient for classification
Carcinogenicity	Data are conclusive but insufficient for classification
Germ cell mutagenicity	Data are conclusive but insufficient for classification
Reproductive toxicity	Data are conclusive but insufficient for classification
Aspiration hazard	Data are conclusive but insufficient for classification

SECTION 12: Ecological information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	No data available	No data available	No data available	No data available	No data available
N,N-Dimethylformamide	Desmodesmus subspicatus EC50>500 mg/L (96 h)	Daphnia magna EC50=6800 - 13900 mg/L (48 h) Daphnia magna EC50=8485 mg/L (48 h) Daphnia magna EC50=7500 mg/L (48 h)	No data available	No data available	logPow-1.028
Hexane	No data available	Daphnia magna EC50>1000 mg/L (24 h)	No data available	No data available	No data available

Mobility in soil No information available.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

Environmental hazards

Revision date 20-Aug-2019
Product code 21335

Page 7 / 10
Product name EZ-Link (tm) Sulfo-NHS-LC-Biotin

Not Applicable

Special precautions for user

Not Applicable

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

Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
Sulfosuccinimidyl 6-(biotinamido) Hexanoate 127062-22-0 (98-100)	-
N,N-Dimethylformamide 68-12-2 (<0.01)	Listed
Hexane 110-54-3 (<0.01)	Listed

US Federal Regulations**SARA 313**

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers.

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>SARA 313 - Threshold Values</u>
N,N-Dimethylformamide	68-12-2	<0.01	1.0
Hexane	110-54-3	<0.01	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs

<u>Component</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>HAPS data</u>
N,N-Dimethylformamide 68-12-2 (<0.01)	68-12-2	<0.01	Present (listed under Dimethyl formamide)
Hexane 110-54-3 (<0.01)	110-54-3	<0.01	Present

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>Category</u>
N,N-Dimethylformamide	68-12-2	<0.01	Carcinogen

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u>	<u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u>
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	127062-22-0	Not Listed	Not Listed
N,N-Dimethylformamide	68-12-2	Not Listed	Not Listed

Revision date 20-Aug-2019
Product code 21335

Page 9 / 10
Product name EZ-Link (tm) Sulfo-NHS-LC-Biotin

Hexane	110-54-3	Not Listed	Not Listed
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SECTION 16: Other information

Reason for revision SDS sections updated.
Revision number 5
Revision date 20-Aug-2019

Use as laboratory reagent. Scientific research and development.

References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet