

# 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** Within the USA + Canada: 1-800-424-9300 and  
**[or Dangerous Goods] Incident. Spill, Leak, Fire,** 1-703-527-3887  
**Exposure, or Accident. Call CHEMTREC** Outside the USA + Canada: 1-703-741-5970

**Country Specific Emergency Number (if available):**

**For research use only. Not for use in diagnostic procedures**

## SECTION 2: Hazards identification

### GHS Classification

**Signal Word**  
None

**Hazard pictograms**  
None

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**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**

Chemical Name	CAS No.	Common name	EC No.	Weight-%
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	127062-22-0	Not applicable	-	98-100
N,N-Dimethylformamide	68-12-2	Not applicable	200-679-5	<0.01
Hexane	110-54-3	Not applicable	203-777-6	<0.01

We recommend handling all chemicals with caution.

## SECTION 4: First aid measures

### Description of first aid measures

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

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Unsuitable extinguishing media</b>	No information available.

### Special hazards arising from the substance or mixture

Not known

### Advice 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)

For research use only. Not for use in diagnostic procedures.

## 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 <sup>3</sup>	None	5 ppm	None
Hexane	500 ppm 1800 mg/m <sup>3</sup>	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 <sup>3</sup>	None	None
Hexane	50 ppm	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

Physical state	powder	
Color	white, off-white	
Odor	No data available	
Molecular Weight	No data	
Melting point / melting range	°C No data	°F No data
Boiling point / boiling range	°C No data	°F No data
Flammability (solid, gas)	No data available	
Lower explosion limit	No data	
Upper explosion limit	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	
Viscosity	No data	
Solubility	No data available	
Partition coefficient: n-octanol/water	No data available	
Vapor Pressure	No data	
Specific gravity	No data	
Relative density	No data	
Vapor density	No data	
Explosive properties	No data	
Oxidizing properties	No data	
Particle characteristics	No data	

### Other information

#### Information with regard to physical hazard classes

No information available

#### Other safety characteristics

No information 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	= 2800 mg/kg (Rat)	= 1.500 mg/kg (Rabbit)	4 h - 9 - 15 mg/l (Rat)
Hexane	= 25 g/kg (Rat)	= 3000 mg/kg(Rabbit)	=48000ppm(Rat)

### Principal Routes of Exposure

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

## SECTION 12: Ecological information

### Toxicity

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
<b>Sulfosuccinimidyl 6-(biotinamido) Hexanoate</b>	No data available	No data available	No data available	No data available	No data available
<b>N,N-Dimethylformamide</b>	Desmodesmus subspicatus EC50>500 mg/L (96 h)	Daphnia magna EC50=8485 mg/L (48 h) Daphnia magna EC50=7500 mg/L (48 h) Daphnia magna EC506800 - 13900 mg/L (48 h)	No data available	No data available	logPow-1.028
<b>Hexane</b>	No data available	No data available	No data available	No data available	logPow4

**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

<b>UN number or ID number</b>	Not Applicable
<b>UN proper shipping name</b>	Not Applicable
<b>Transport hazard class(es)</b>	Not Applicable
<b>Packing group</b>	Not Applicable

### Environmental hazards

Not Applicable

**Special precautions for user**

Not Applicable

**Maritime transport in bulk according to IMO instruments**

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	0.1
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	Present (listed under Dimethyl formamide)
Hexane	110-54-3	<0.01	Present
110-54-3 ( <0.01 )			

**US State Regulations**

Chemical Name	Massachusetts - RTK (Right-to-Know)	New Jersey - RTK (Right-to-Know)	Pennsylvania - RTK (Right-to-Know)
N,N-Dimethylformamide	Listed	Listed	Listed
Hexane	Listed	Listed	Listed

**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
Hexane	110-54-3	<0.01	Male Reproductive

**WHMIS Hazard Class**

Non-controlled

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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**

<b><u>Chemical Name</u></b>	<b><u>CAS No.</u></b>	<b>Brazil - National Agency for Sanitary Surveillance (ANVISA)</b>	<b>Brazil - National List of Carcinogen Agents to Humans (LINACH)</b>
Sulfosuccinimidyl 6-(biotinamido) Hexanoate	127062-22-0	Not Listed	Not Listed
N,N-Dimethylformamide	68-12-2	Not Listed	Not Listed
Hexane	110-54-3	Not Listed	Not Listed

### **SECTION 16: Other information**

**Reason for revision** SDS sections updated.  
**Revision number** 6  
**Revision date** 09-Jul-2023

For research use only. Not for use in diagnostic procedures.

### **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>

### **Abbreviations and acronyms**

**TWA** - Time-Weighted Average  
**OELs** - Occupational Exposure Limits  
**STEL** - Short Term Exposure Limit  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CEPA** - Canadian Environmental Protection Act  
**EPA** - Environmental Protection Agency  
**OSHA** - Occupational Safety and Health Administration of the US Department of Labor  
**IATA** - International Air Transport Association  
**DOT** - Department of Transportation  
**IMDG** - International Maritime Dangerous Goods  
**ACGIH** - American Conference of Governmental Industrial Hygienists  
**NIOSH** - National Institute for Occupational Safety and Health  
**AIHA** - American Industrial Hygiene Association  
**HMIS** - Department of Defense Hazardous Materials Information System  
**NTP** - National Toxicology Program  
**IARC** - International Agency for Research on Cancer

"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**