

## Safety Data Sheet

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

#### Identification of the substance or mixture

**Product code** 4311320  
**Product name** Hi-Di Formamide

#### 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

**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):**

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

### SECTION 2: Hazards identification

#### GHS - Classification

**Signal Word**  
DANGER

**Hazard pictograms**



#### Health hazards

Specific target organ toxicity (STOT) – repeated exposure

Category 2

**Revision date** 27-Apr-2018  
**Product code** 4311320

**Page** 1 / 9  
**Product name** Hi-Di Formamide

Carcinogenicity	Category 2
Reproductive Toxicity	Category 1B

### Physical hazards

Not Hazardous

### Environmental hazards

Not Hazardous

### Hazard Statements

H360 - May damage fertility or the unborn child if swallowed

H351 - Suspected of causing cancer if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

### Precautionary Statements

#### Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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

P281 - Use personal protective equipment as required

#### Response

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P314 - Get medical advice/attention if you feel unwell

#### Storage

Not Applicable

#### Disposal

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

### Other hazards

Not Applicable

### HMIS

Health	2 * Chronic Hazard
Flammability	1
Reactivity	0

## SECTION 3: Composition/information on ingredients

Component	CAS No.	Common name	EINECS-No	Weight-%
Formamide 75-12-7 ( 95-100 )	75-12-7	-	200-842-0	95-100

We recommend handling all chemicals with caution.

## SECTION 4: First aid measures

### Description of first aid measures

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. If swallowed, rinse mouth with water (only if the person is conscious). Risk of serious damage to the lungs (by aspiration). Get medical attention if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Notes to Physician</b>	Treat symptomatically.

### Most important symptoms and effects, both acute and delayed

H360 - May damage fertility or the unborn child if swallowed H351 - Suspected of causing cancer if swallowed H373 - May cause damage to organs through prolonged or repeated exposure

### Indication of any immediate medical attention and special treatment needed

None.

## SECTION 5: Firefighting measures

### Extinguishing media

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

### Special hazards arising from the substance or mixture

Not known.

### Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid exposure to vapor  
Avoid breathing vapors or mists  
Ensure adequate ventilation  
Avoid contact with skin, eyes or clothing  
Use personal protection equipment  
See Section 8 for more detail

### Environmental precautions

Should not be released into the environment. Prevent product from entering drains.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

### Reference to other sections

See section 8 for more information.

## SECTION 7: Handling and storage

### Precautions for safe handling

Always wear recommended Personal Protective Equipment. Wash hands before breaks and immediately after handling the product. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or mists. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. See Section 8 for more detail.

### Conditions for safe storage, including any incompatibilities

Keep in properly labeled containers. Keep in a dry, cool and well-ventilated place. Store in accordance with local regulations. Keep away from combustible material.

### Specific end use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Formamide	37 mg/m <sup>3</sup>	None	10 ppm	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Formamide	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**

Glove material: Nitrile rubber. with thickness (mm). :5. Break through time. (hours). :>1.  
Recommended glove type has not been tested for use with product. Information is based on professional Knowledge.

**Eye protection**

Tight sealing safety goggles.

**Skin and Body Protection**

Wear laboratory coat for body protection.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls**

Should not be released into the environment. Prevent product from entering drains.

## SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

<b>Appearance</b>	liquid	
<b>Odor</b>	Mixture has not been tested	
<b>Odor Threshold</b>	Mixture has not been tested	
<b>Molecular Weight</b>	No data	
<b>pH</b>	Mixture has not been tested	
<b>Melting point / melting range</b>	°C 0-2.5	°F 32-36.5
<b>Boiling point / boiling range</b>	°C 100-210	°F 212-410
<b>Flash point</b>	°C >120	°F >248
<b>Autoignition Temperature</b>	°C >500	°F >932
<b>Decomposition temperature</b>	°C No data	°F No data
<b>Evaporation rate</b>	No data	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Upper explosion limit</b>	No data	
<b>Lower explosion limit</b>	No data	
<b>Vapor Pressure</b>	No data	
<b>Vapor density</b>	No data	
<b>Relative density</b>	No data	
<b>Specific gravity</b>	No data	
<b>Solubility</b>	Soluble in water	
<b>Partition coefficient: n-octanol/water</b>	No data	
<b>Viscosity</b>	Mixture has not been tested	
<b>Explosive properties</b>	Mixture has not been tested	
<b>Oxidizing properties</b>	Mixture has not been tested	

**Other information**

No data.

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to avoid</b>	High temperature. Thermal decomposition of the finish can take place above (>248°F) >120 °C.
<b>Incompatible materials</b>	Oxidizing agents. Acids. Bases. Sulphur trioxide. Iodine.
<b>Hazardous decomposition products</b>	Carbon monoxide. Hydrogen cyanide (hydrocyanic acid). Nitrogen oxides (NOx).

## SECTION 11: Toxicological information

### Information on toxicological effects

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Formamide	3200 mg/kg	13500 mg/kg	3900 ppm/6H

### 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>	Target organ(s) : Cardiovascular System Hematopoietic System
<b>Carcinogenicity</b>	Contains a known or suspected carcinogen
<b>Germ cell mutagenicity</b>	Data are conclusive but insufficient for classification
<b>Reproductive toxicity</b>	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility
<b>Aspiration hazard</b>	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	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Formamide	Desmodesmus subspicatus EC50>500 mg/L (72 h) Desmodesmus subspicatus EC50>500 mg/L (96 h)	Daphnia magna EC50>500 mg/L (48 h)	No data available	No data available	logPow-0.82

**Mobility in soil** No information available.

**Persistence and degradability** Readily biodegradable.

**Bioaccumulative potential** Material does not bioaccumulate.

### 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 regulated 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

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
Formamide 75-12-7 ( 95-100 )	Listed

#### US Federal Regulations

##### **SARA 313**

This product is not regulated by SARA.

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

This product does not contain HAPs.

#### US State Regulations

##### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

##### **WHMIS Hazard Class**

D2A - Very toxic materials



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

Chemical Name	CAS No.	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
Formamide	75-12-7	Not Listed	Not Listed

#### SECTION 16: Other information

**Reason for revision** SDS sections updated.

**Revision number** 16

**Revision date** 27-Apr-2018

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##### **References**

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>

**Revision date** 27-Apr-2018  
**Product code** 4311320

**Page** 8 / 9  
**Product name** Hi-Di Formamide

- 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**