

## 1. Identification of the substance/mixture and of the company/undertaking

### Identification of the substance/preparation

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

### Company/Undertaking Identification

Life Technologies  
5791 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:

866-536-0631  
301-431-8585  
Outside of the U.S. +1-301-431-8585

**For research use only. Not intended for human or animal diagnostic or therapeutic uses.**

## 2. Hazards identification

### GHS - Classification

**Signal Word**  
**DANGER**



### Health Hazard

Skin Corrosion/Irritation	Category 3
Serious Eye Damage/Eye Irritation	Category 2B
Reproductive Toxicity	Category 1B

### Physical Hazards

not hazardous

### Hazard statements

H316 - Causes mild skin irritation

H320 - Causes eye irritation

H360 - May damage fertility or the unborn child

### Precautionary statements

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P281 - Use personal protective equipment as required

P264 - Wash hands thoroughly after handling

### Principle Routes of Exposure/ Potential Health effects

#### Eyes

Irritating to eyes.

#### Skin

Irritating to skin and mucous membranes. Components of the product may be absorbed into the body through the skin.

#### Inhalation

May cause irritation of respiratory tract.

#### Ingestion

May be harmful if swallowed.

### Specific effects

#### Carcinogenic effects

not applicable

#### Mutagenic effects

not applicable

#### Reproductive toxicity

May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility Reproductive Category 2

#### Sensitization

not applicable

#### Target Organ Effects

Eyes  
Skin  
Kidney  
Liver  
Central nervous system (CNS)  
Respiratory system  
Reproductive System

### HMIS

Health	2 * Chronic Hazard
Flammability	1
Reactivity	0

### 3. Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Formamide	75-12-7	200-842-0	60-100

We recommend handling all chemicals with caution.

### 4. First aid measures

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**Skin contact** Wash off immediately with plenty of water. In the case of skin irritation or allergic reactions see a physician.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, call a physician.

**Ingestion** Rinse mouth. Consult a physician. Do not induce vomiting without medical advice.

**Inhalation** Move to fresh air. Consult a physician.

**Notes to physician** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable extinguishing media** Foam. Dry powder. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water.

**Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective suit.

**6. Accidental release measures**

**Personal precautions** Use personal protective equipment.

**Methods for cleaning up** Soak up with inert absorbent material.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

**7. Handling and storage**

**Handling** Avoid contact with skin and eyes. Always wear recommended Personal Protective Equipment.

**Storage** Keep in properly labelled containers.

**8. Exposure controls/personal protection**

**Exposure limits**

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

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection** In case of insufficient ventilation wear suitable respiratory equipment.

**Hand protection** Impervious gloves.

**Eye protection** Safety glasses with side-shields.

**Skin and body protection.** Lightweight protective clothing.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls**

Prevent product from entering drains.

9. Physical and chemical properties

**General Information**

**Form** liquid  
**Appearance** colorless  
**Odor** No information available  
**Boiling Point/Range** °C 210 °F 410  
**Melting point/range** °C 2 °F 35-36  
**Flash point** °C 154 °F 309-310  
**Autoignition temperature** °C no data available °F no data available  
**Oxidizing properties** No information available.  
**Water solubility** soluble

10. Stability and reactivity

**Stability** Stable under normal conditions.  
**Materials to avoid** Strong oxidizing agents  
**Hazardous decomposition products** Carbon oxides, Nitrogen Oxides  
**polymerization** Hazardous polymerisation does not occur.

11. Toxicological information

**Acute toxicity**

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Formamide	> 5000 mg/kg (Rat)	13500 mg/kg	3900 ppm/6H

**Principle Routes of Exposure/  
Potential Health effects**

**Eyes** Irritating to eyes.  
**Skin** Irritating to skin and mucous membranes Components of the product may be absorbed into the body through the skin.  
**Inhalation** May cause irritation of respiratory tract.  
**Ingestion** May be harmful if swallowed.  
**Carcinogenic effects** No information available.  
**Mutagenic effects** No information available.  
**Reproductive toxicity** May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility Reproductive Category 2  
**Sensitization** No information available.  
**Target Organ Effects** Eyes Skin Kidney Liver Central nervous system (CNS) Respiratory system Reproductive System

## 12. Ecological information

**Ecotoxicity effects**                      Daphnia magna (Water flea)  
**Mobility**                                      see log Pow  
**Biodegradation**                              No information available.  
**Bioaccumulation**                              No information available.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Formamide 75-12-7	Desmodesmus subspicatus EC50>500 mg/L (72 h) Desmodesmus subspicatus EC50>500 mg/L (96 h)	Daphnia magna EC50>500 mg/L (48 h)			logPow-0.82

## 13. Disposal considerations

Dispose of in accordance with local regulations.

## 14. Transport information

### IATA

**Proper shipping name**                      Not classified as dangerous in the meaning of transport regulations  
**Hazard class**                                      none  
**Subsidiary Class**                                none  
**Packing group**                                    none  
**UN-No**    none

## 15. Regulatory information

Component	TSCA
Formamide 75-12-7 ( 60-100 )	Listed

### U.S. 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 contains HAPs.

### U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Formamide	Listed	Listed	Listed	-	Listed

#### **California Proposition 65**

This product does not contain chemicals listed under Proposition 65

#### **WHMIS Hazard Class**

D2A Very toxic materials



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

## 16. Other information

**Reason for Revision** not applicable. (M)SDS sections updated.

For research use only.

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 MSDS 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**

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