



## MATERIAL SAFETY DATA SHEET

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### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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**PRODUCT NAME:** HI-DI FORMAMIDE

**PRODUCT NUMBER :** 4311320

**SUPPLIER:** APPLIED BIOSYSTEMS  
850 LINCOLN CENTRE DRIVE  
FOSTER CITY, CA, 94404  
USA  
[www.appliedbiosystems.com](http://www.appliedbiosystems.com)

IN CASE OF EMERGENCY CALL  
CHEMTRAC 1-800-424-9300.

**PRODUCT USE DESCRIPTION:** FOR RESEARCH USE ONLY. NOT FOR USE IN  
DIAGNOSTIC PROCEDURES

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### 2. HAZARDS IDENTIFICATION

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#### Emergency Overview

##### Warning!

Irritating to eyes, respiratory system and skin.  
Harmful if absorbed through skin.  
Also harmful by inhalation and if swallowed.  
Affects the central nervous system.  
May affect the reproductive system.

#### Potential health effects

##### **Inhalation :**

Causes respiratory tract irritation.  
Harmful if inhaled.

##### **Skin :**

Causes skin irritation.  
Harmful if absorbed through skin.

##### **Eyes :**

Causes eye irritation.

##### **Ingestion :**

Harmful if swallowed.

#### **Physical and chemical hazards :**

This information is not available.

#### **Target Organs :**

Blood  
Central nervous system  
Liver  
Kidney

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Hazardous components	CAS-No.	Weight %
FORMAMIDE	75-12-7	60 - 100 %

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### 4. FIRST AID MEASURES

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**Eye contact** Immediately flush eyes for at least 15 minutes. Get medical attention.

**Inhalation** Remove to fresh air immediately. Get medical attention immediately. If not breathing, give artificial respiration.

**Skin contact** Rinse immediately with plenty of water and seek medical advice. Remove and wash contaminated clothing before re-use.

**Ingestion** If swallowed, call a poison control centre or doctor immediately. Never give anything by mouth to an unconscious person.

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### 5. FIRE-FIGHTING MEASURES

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**Suitable extinguishing media** Water spray  
Carbon dioxide (CO2)  
Foam  
Dry chemical

**Hazardous decomposition products** Carbon oxides, nitrogen oxides (NOx), Ammonia

**Special protective equipment for fire-fighters** Wear self contained breathing apparatus for fire fighting if necessary. Use personal protective equipment.

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### 6. ACCIDENTAL RELEASE MEASURES

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#### Personal precautions

Ensure adequate ventilation.  
Avoid contact with skin, eyes and clothing.  
Avoid breathing dust/fume/gas/mist/vapours/spray.

#### Environmental precautions

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

#### Methods for cleaning up

Clean contaminated floors and objects thoroughly while observing environmental regulations. Ensure adequate ventilation.

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

### Storage conditions

Protect against physical damage. Isolate from incompatible substances. Store in original container. See product label for specific storage requirements.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Exposure limit(s)

Hazardous components	Regulation	Type of listing	Value
FORMAMIDE	ACGIH	TWA	10 ppm
	NIOSH	TWA	15 mg/m <sup>3</sup>
	California	PEL	10 ppm
			18 mg/m <sup>3</sup>
<b>Eye protection</b>	Chemical resistant goggles must be worn. Ensure that eyewash stations and safety showers are close to the workstation location.		
<b>Hand protection</b>	Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.		
<b>Respiratory protection</b>	Avoid breathing vapors, mist or gas. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. For unknown concentrations or Immediately Dangerous to Life or Health (IDLH), use a full-facepiece positive pressure air supplied respirator.		
<b>Skin protection</b>	Wear suitable protective clothing.		
<b>Engineering measures</b>	Maintain air concentrations below occupational exposure standards. Use only in area provided with appropriate exhaust ventilation.		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical state</b>	liquid
<b>Colour</b>	This information is not available.
<b>Odour</b>	This information is not available.
<b>Odour Odour</b>	This information is not available.
<b>Threshold</b>	
<b>pH</b>	This information is not available.
<b>Boiling point</b>	This information is not available.
<b>Melting point</b>	This information is not available.
<b>Vapour pressure</b>	This information is not available.
<b>Water solubility</b>	This information is not available.
<b>Flash point</b>	This information is not available.
<b>Explosion limits</b>	This information is not available.
<b>Density</b>	This information is not available.
<b>Percent volatile</b>	This information is not available.
<b>Volatile organic</b>	This information is not available.

**compounds (VOC)  
content**

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## **10. STABILITY AND REACTIVITY**

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**Conditions to avoid** Keep away from open flames, hot surfaces and sources of ignition.

**Materials to avoid** Acids, Bases, Oxidizing agents

**Hazardous  
decomposition  
products** Carbon oxides, nitrogen oxides (NOx), Ammonia

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## **11. TOXICOLOGICAL INFORMATION**

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Hazardous components : **FORMAMIDE**

**Acute oral toxicity** LD50 rat > 5,000 mg/kg

**Acute inhalation toxicity** LC50 rat 6 h >3900 ppm

### **Further information**

The product itself has not been tested.

## **12. ECOLOGICAL INFORMATION**

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We have no quantitative data concerning the ecological effects of this product.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component: **FORMAMIDE**

### **Ecotoxicity effects**

**Toxicity to fish** static test LC50 Brachydanio rerio (zebra fish) 96 h  
9,135 mg/l

static test LC50 Leuciscus idus (Golden orfe) 96 h  
4,600 mg/l

**Toxicity to algae** EC50 Scenedesmus subspicatus 72 h  
> 500 mg/l

EC50 Scenedesmus subspicatus 96 h  
> 500 mg/l

**Toxicity to bacteria** EC50 Pseudomonas putida 17 h  
> 10,000 mg/l

**Toxicity to daphnia** EC50 Daphnia magna (Water flea) 48 h  
> 500 mg/l

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## 13. DISPOSAL CONSIDERATIONS

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<b>Environmental precautions</b>	Should not be released into the environment. Prevent product from entering drains.
<b>Disposal methods</b>	Dispose of in accordance with local regulations.
<b>General advice</b>	<b>DISPOSAL CONSIDERATIONS</b> The product has to be disposed of as laboratory chemical in accordance with local regulations.

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## 14. TRANSPORT INFORMATION

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### DOT

#### DOT: ROAD TRANSPORT

Not dangerous goods

### IATA-DGR

Not dangerous goods

### IMDG

Not dangerous goods

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## 15. REGULATORY INFORMATION

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### US Regulations

#### 40 CFR § 302.4 Designation of hazardous substances (SARA 302).

Non-hazardous substance

#### 40 CFR § 355 Appendices A and B - The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (SARA304).

Non-hazardous substance

#### 40 CFR § 372.65 Toxic Chemical Release Reporting (SARA 313).

Non-hazardous substance

### State Regulations

#### U.S. - California - 8 CCR Section 5200-5220 - Specifically Regulated Carcinogens

No components found on the California Specifically Regulated Carcinogens List.

#### U.S. - California - 8 CCR Section 5203 Carcinogens

No components found on the California Section 5203 Carcinogens List.

#### U.S. - California - 8 CCR Section 5209 Carcinogens

No components found on the California Section 5209 Carcinogens List.

#### U.S.- New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1)

Listed Components regulated under the New Jersey Worker and Community Right-to-Know Act.

Hazardous components

FORMAMIDE

**U.S.- Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law)**

Listed Components regulated under the Massachusetts Hazardous Substances Disclosure by Employers Law.

Hazardous components

FORMAMIDE

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Found on the California Director's List of Hazardous Substances.

Hazardous components

FORMAMIDE

**California Prop. 65**

Not Regulated

**National Inventory Status - United States of America**

**TOXIC SUBSTANCES CONTROL ACT (TSCA) 8 (B) INVENTORY**

All the components of this substance are listed on or are exempt from the inventory. For purposes of 40 CFR 720.36 , this product is for Research and Development (R&D) Use Only

**TOXIC SUBSTANCES CONTROL ACT, SECTION 12(B) EXPORT NOTIFICATION**

**40CFR 707, SUBPART D**

Not Required.

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## 16. OTHER INFORMATION

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Disclaimer: This MSDS has been prepared using information from sources considered technically reliable. It should not be relied upon as a product specification. The company makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or in combination with other chemical substances. Every user of the product is responsible for evaluating its own processes and conditions of use and selecting appropriate protective measures for employee exposure.

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