

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: HI-DI FORMAMIDE

PRODUCTNUMBER : 4311320

SUPPLIER: APPLIED BIOSYSTEMS
850 LINCOLN CENTRE DRIVE
FOSTER CITY, CA, 94404
USA
www.appliedbiosystems.com

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

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

2. HAZARDS IDENTIFICATION

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST AID MEASURES

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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water spray Carbon dioxide (CO ₂) Foam Dry chemical
Hazardous decomposition products	Carbon oxides, nitrogen oxides (NO _x), Ammonia
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fire fighting if necessary. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Hazardous components	Regulation	Type of listing	Value
FORMAMIDE	ACGIH	TWA	10 ppm
	NIOSH	TWA	15 mg/m ³ 10 ppm
	California	PEL	18 mg/m ³ 10 ppm

Eye protection

Chemical resistant goggles must be worn.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection

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.

Respiratory protection

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.

Skin protection

Wear suitable protective clothing.

Engineering measures

Maintain air concentrations below occupational exposure standards. Use only in area provided with appropriate exhaust ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

compounds (VOC)
content

10. STABILITY AND REACTIVITY

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 (NO_x), Ammonia

11. TOXICOLOGICAL INFORMATION

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

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

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

DOT**DOT: ROAD TRANSPORT**

Not dangerous goods

IATA-DGR

Not dangerous goods

IMDG

Not dangerous goods

15. REGULATORY INFORMATION

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.

16. OTHER INFORMATION

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.

Document no. 100000003525

Print Date 5/29/2010 2:33:00 PM