



Issuing Date: 22-Dec-1997

Revision Date: 12-July-2018

Rev. 6

## 1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

**Product Name:** Formamide  
**Product Code:** IB72020 & IB72024  
**Recommend Use:** For further manufacturing use only  
Not for human or animal drug use  
Used for denaturing nucleic acids in hybridization and DNA sequencing procedures  
**Synonyms:** AMID KYSELINY MRAVENCI (CZECH) \* CARBAMALDEHYDE \* FORMAMIDE (ACGIH) \* METHANAMIDE \* METHANQIC ACID, AMIDE \*  
**Company:** IBI SCIENTIFIC  
7445 Chavenelle Road  
Dubuque, IA 52002  
**Emergency Tele. Number:** 3E Company (Acct# 9027) 1-800-451-8346 / (001) 760-602-8703  
**Company Tele. Number:** 1-800-253-4942 / (001) 563-690-0484  
**E-Mail Address:** [info@ibisci.com](mailto:info@ibisci.com)

## 2. HAZARDOUS IDENTIFICATION

### GHS – Classification

**Classification:** This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)  
**Signal Word:** Danger



**Hazard Statements:** H360-May damage fertility or the unborn child  
**Precautionary Statements:** P201-Obtain special instruction before use \* P202-Do not handle until all safety precautions have been read and understood \* P281-Use personal protective equipment as required \* P308+P313-IF EXPOSED OR CONCERNED: Get medical advice/attention \* P405-Store locked up \* P501-Dispose of contents/container to an approved waste disposal plant.  
**Hazards not otherwise classified:** Not regulated  
**Other Information:** May be harmful if inhaled  
**Unknown Acute Toxicity:** 0.58% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Formamide  
**EC No.:** EEC No. 200-842-0  
**REACH Reg. No.:** Not Available  
**CAS No.:** 75-12-7  
**Weight %:** 98 – 100  
**Classification:** Repr.Cat.2; R61

### 4. FIRST AID MEASURES

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.  
**Skin Contact:** Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes.  
**Inhalation:** Move to fresh air. If not breathing, give artificial respiration.  
**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth.  
**Notes to Physician:** Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Not flammable  
**Flash Point:** 150°C / 302°F  
**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment  
**Hazardous Combustion Products:** Carbon oxides, Nitrogen oxides (NOx), Hydrogen cyanide  
**Explosion Data**  
    Sensitivity to Mechanical Impact: Not sensitive  
    Sensitivity to Static Discharge: Not sensitive  
**Protective Equip. & Precautions for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equiv.) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Ensure adequate ventilation, especially in confined areas.  
**Methods for Containment:** Prevent further leakage or spillage, if safe to do so.  
**Methods for Cleaning Up:** Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

### 7. HANDLING AND STORAGE

**Handling:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing.  
**Storage:** Keep container tightly closed in a dry and well ventilated place.  
**Incompatible Products:** Acids, Bases, Strong oxidizing agents, Iron and Iron salts, Copper alloys, Rubber, Aluminum

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Chemical Name:** Formamide - #75-12-7  
**ACGIH TLV:** TWA: 10ppm  
**OSHA PEL:** -  
**NIOSH IDLH:** TWA: 10ppm \* TWA: 15mg/m<sup>3</sup>

<b>Engineering Measures:</b>	Showers, Eyewash Stations, Ventilation Systems
<b><u>Personal Protective Equipment</u></b>	
Eye/Face Protection:	Safety glasses with side-shields. Avoid contact with eyes.
Skin & Body Protection:	Wear protective gloves/clothing.
Respiratory Protection:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene Measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colorless, slightly viscous liquid
<b>Odor:</b>	faint odor, slight ammonia
<b>Odor Threshold:</b>	No information available
<b>Decomposition Temp. °C:</b>	No information available
<b>Freezing Point:</b>	No information available
<b>Initial Boiling Point:</b>	No information available
<b>Physical State:</b>	Liquid
<b>pH:</b>	4 - 10
<b>Flash Point:</b>	152°C / 302°F
<b>Autoignition Temp. °C:</b>	499°C / 932°F
<b>Decomposition Temperature:</b>	180-210°C
<b>Boiling Point/Range:</b>	210-216°C
<b>Melting Point/Range:</b>	1-3°C
<b>Flammability Limits (Air):</b>	<u>Upper</u> -No data available * <u>Lower</u> -No data available
<b>Explosive Properties:</b>	No information available
<b>Oxidizing Properties:</b>	No information available
<b>Evaporation Rate:</b>	No data available
<b>MMHG @ 37.8°C:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Specific Gravity:</b>	1.133
<b>Density:</b>	1.55
<b>Solubility:</b>	No information available
<b>Water Solubility:</b>	No data available
<b>Partition Coefficient (n-octanol/water):</b>	No data available
<b>Viscosity:</b>	No information available
<b>Molecular Weight:</b>	45.04

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions
<b>Incompatible Products:</b>	Acids, Bases, Strong oxidizing agents, Iron and Iron Salts, Copper alloys, Rubber, Aluminum
<b>Conditions to Avoid:</b>	Protect from moisture. Heating to decomposition or contact with acids or acid vapors can liberate poisonous cyanide vapors
<b>Hazardous Decomposition Products:</b>	In the event of fire: see section 5.
<b>Hazardous Polymerization:</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### **Acute Toxicity**

Product Information:	Inhalation:	There is no data available for this product
	Eye Contact:	There is no data available for this product
	Skin Contact:	There is no data available for this product
	Ingestion:	There is no data available for this product
Chemical Name:	Formamide - #75-12-7	
LD50 Oral:	5577mg/kg (Rat) * 5000mg/kg (Rat)	
LD50 Dermal:	-	
LC50 Inhalation:	> 3900ppm (Rat) 6h	

### **Information on toxicological effects**

Symptoms:	No information available
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### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization:	No information available
Mutagenic Effects:	No information available
Carcinogenicity:	No information available
Chemical Name:	Formamide - #75-12-7
ACGIH:	-
IARC:	-
NTP:	-
OSHA:	-

**Reproductive Toxicity:** Presumed human reproductive toxicant

**STOT – single exposure:** No information available

**STOT – repeated exposure:** No information available

**Chronic Toxicity** Suspected teratogen

**Target Organ Effects** Blood

**Aspiration hazard** No information available

### **Numerical measures of toxicity – Product Information**

**Unknown Acute Toxicity:** 0.58% of the mixture consists of ingredient(s) of unknown toxicity

**The following values are calculated based on chapter 3.1 of the GHS document.**

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	0.58% of the mixture consists of component(s) of unknown hazards to the aquatic environment
Chemical Name:	Formamide - #75-12-7
Toxicity to Algae:	EC50 > 500mg/L (48h) EC50 > 500mg/L (72h)
Toxicity to Fish:	LC50 = 4600-9300mg/L <i>Leuciscus idus</i> (96h) LC50 = 9135mg/L <i>Brachydanio rerio</i> (96h)
Crustacea	EC50 = 500mg/L <i>Daphnia magna</i> (48h)
<b>Persistence and Degradability</b>	No information available
<b>Bioaccumulation/Accumulation</b>	No information available

## 13. DISPOSAL CONSIDERATIONS

<b>Water Disposal Method:</b>	Dispose of material in accordance with all federal, state, and local regulations.
<b>Contaminated Packaging:</b>	Do not re-use empty containers

## 14. TRANSPORT INFORMATION

### **IATA**

Not regulated

### **US DOT**

Not regulated

## 15. TOXICOLOGICAL INFORMATION

### **REACH Title VII Restrictions**

Chemical Name:	No information available
Dangerous Substances:	Formamide - #75-12-7
Organic Solvents:	>=>=1% by weight
Harmful Substances Whose Names are to be indicated on the Label:	Not applicable
Pollution Release and Transfer Registry (Class II):	Not applicable
Pollution Release and Transfer Registry (Class I):	Not applicable
Poison and Deleterious Substances Control Law:	Not applicable
ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying:	Not applicable
ISHA – Harmful Substances Requiring Permission:	Not applicable
Toxic Chemical Classification Listing (TCCL):	Not applicable
Toxic Release Inventory (TRI) – Group I:	Not applicable
Toxic Release Inventory (TRI) – Group II:	Not applicable

### **International Inventories**

TSCA:	Complies
DSL:	Complies
EINECS/ELINCS:	Complies
ENCS:	Complies
IECSC:	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### **U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain a chemical/chemicals which are subject to the reporting requirements of the Act & Title 40 of the Code of Federal Regulations, part 372.

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product does not contain any substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name:	Formamide - #75-12-7
CWA - RQ	-
CWA – Toxic Pollutants:	-
CWA – Priority Pollutants:	-
CWA – Hazardous Substance:	-

**Clean Air Act**

Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61). This product contains the following substances which are listed hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act.

Chemical Name:	Formamide - #75-12-7
Weight (%):	95 - 100
HAPs Data:	-
VOC Chemicals:	Group II
Class 1 Ozone Depletors:	-
Class 2 Ozone Depletors:	-

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name:	Formamide - #75-12-7
Hazardous Substances RQs:	-
Extremely Hazardous Substances RQs:	-
RQ:	-

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**State**

Massachusetts	X
New Jersey	X
Pennsylvania	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number: Not regulated

**International Regulations****Mexico**

Chemical Name:	Formamide - #75-12-7
Carcinogen Status:	-
Exposure Limits:	Mexico: TWA = 30mg/m <sup>3</sup> Mexico: TWA = 20ppm

**Canada****WHMIS Hazard Class**

D2A – Very toxic materials



**16. OTHER INFORMATION**

<b>Issuing Date:</b>	22-Dec-1997
<b>Revision Date:</b>	12-July-2018
<b>Revision Note:</b>	Updated address and logo
<b>Recommended Restrictions:</b>	No information available
<b>Disclaimer:</b>	The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release; and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the test.

**End of Safety Data Sheet**