

**AERCHEM INC.**  
320 North Walnut  
Bloomington, IN 47408

Tel: 812.334.9996      Fax: 812.334.1960      Emergency: 800.424.9300

**Product Name:** FORMAMIDE  
**Syno:** METHANAMIDE

**Molecular Formula:** HC0HNNH(2)

**Cas No.:** 75-12-7

**Date Prepared:** 2/25/86      **Updated:** 3/14/89

**Haz**

**ardous Ingredients:**

Melting point (range) Approx.:	N/A
Boiling point:	111-112° C
pH (depends on quality):	4.0 -5.0
Solubility in water:	MISCIBLE
Odor:	AMMONIACAL
Appearance:	COLORLESS LIQUID

**Ingredients:**

<u>Component</u>	<u>CAS NO.</u>	<u>%</u>	<u>PEL/TLV - Source</u>
Formamide	75-12-7	99.6	10 ppm skin ACGIM 20 ppm skin STEL ACGIM 30 ppm STEL OSHA (Final)
Contains:			
Ammonium Formate	540-69-2	0.1	Not Established
Methanol	67-56-1	0.1	200 ppm skin ACGIM 250 ppm skin STEL ACGIM 200 ppm OSHA 250 ppm skin STEL (Final)

**Fire and Explosion Information:**

Flash point:	175°C DIN 51584
(Auto) ignition temperature:	500°C
Extinguishing media to be recommended:	USE FOG WATER EXTINGUISHING MEDIA
Special fire and explosions precautions:	Firefighters should be equipped with self-contained breathing apparatus and turnout gear
Fire and explosions hazards:	MODERATE WHEN EXPOSED TO HEAT OR FLAMES. CAN REACT WITH OXIDIZING MATERIAL

**Reactivity Data:**      Stable   X        Unstable \_\_\_\_\_  
**Conditions to avoid:**      Decomposes at temperatures >180° C  
**Hazardous Decomposition:**      CO AND NOX  
**Hazardous Polymerization:**      DOES NOT OCCUR

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**Incompatibilities:**

ALKALI AND ACIDS

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**Leak/Spill Information:**

Spills should be contained, solidified, and placed in suitable containers for disposal. This material is not regulated under RCRA or CERCLA ("Superfund").

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**HAZARDOUS SUBSTANCE SUPERFUND: No**

**Hazardous Waste No.:**

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**Container Disposal Information:**

Dispose of in licensed facility.

Recommend crushing or other means to prevent unauthorized use.

**Environmental Toxicity Data:**

Minnow, 48 hour LC50 >500 mg/L.

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**Health Hazard Information:**

**A. Exposure/Health Effects**

**Inhalation of Vapors:** Causes respiratory irritation

**Eye and Skin:** Irritation on Contact, can be absorbed through the skin

**Ingestion:** Causes Gastrointestinal irritation

**SPECIAL WARNING TO PREGNANT WORKERS:**

**Avoid any exposure to formamide unless all precautions as specified on this MSDS and label are observed. Small amounts of Formamide, if repeatedly inhaled, ingested or absorbed through the skin may cause fetal injury.**

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**Chronic Exposures:**

**B. First Aid:**

**Inhalation:** Move to Fresh air. Aid in breathing, if necessary, and get immediate medical attention.

**Ingestion:** If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

**Skin Contact:** Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.

**Eye Contact:** Immediately wash affected area with running water for 15 minutes. If irritation develops, consult a physician.

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**C. Toxicity Data:**

Formamide

Rat. Oral LD50

Rabbit, Skin

Rabbit, eyes

**Result:**

5.1 ml/kg.

Slightly irritating

Moderately irritation

Can cause slight corneal clouding

Rat, oral lowest reported toxic dose 467 ul/kg/day

Embryotoxic days 6-15 preg.

Rat, percutaneous lowest reported toxic dose 4.03 ml/kg. Embryotoxic

**Effects of Overexposure:**

Contact with skin causes irritation, especially if contact is prolonged.

Liquid causes marked eye irritation which may persist for several days.

Vapors are irritating to the nose, throat and lungs.

If swallowed irritation of the GI tract can occur.

Formamide is absorbed through the skin.

Animal studies have shown that Formamide can cause embryotoxicity.

At levels sufficiently high to cause maternal toxicity, birth defects and fetal deaths were seen.

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**Occupational Control Measures:**

**Ventilation Systems:**

**SPECIAL PRECAUTION:**

Local exhaust required to control P.E.L.  
**PREGNANT WORKERS SHOULD KEEP  
EXPOSURE TO A MINIMUM**

**Personal Respirators:(Niosh Approved) Organic Vapor Respirator**

**Skin Protection:**

**Gloves, coveralls, apron, boots as necessary  
to prevent skin contact. Formamide is skin  
absorbed, avoid all contact.**

**Eye Protection:**

**Chemical goggles and face shield**

# PRODUCT LABEL

## CAUTION:

CONTACT WITH SKIN CAUSES IRRITATION, ESPECIALLY IF CONTACT IS PROLONGED. LIQUID CAUSES MARKED EYE IRRITATION WHICH MAY PERSIST FOR SEVERAL DAYS. VAPORS ARE IRRITATING TO THE NOSE, THROAT AND LUNGS. IF SWALLOWED IRRITATION OF THE GI TRACT CAN OCCUR. FORMAMIDE IS ABSORBED THROUGH THE SKIN.

## SPECIAL WARNING TO PREGNANT WORKERS:

ANIMAL STUDIES HAVE SHOWN THAT FORMAMIDE CAN CAUSE EMBRYOTOXICITY. AT LEVELS SUFFICIENTLY HIGH TO CAUSE MATERNAL TOXICITY, BIRTH DEFECTS AND FETAL DEATHS WERE SEEN.

Use with local exhaust. Wear an approved organic respirator, goggles, face shield, gloves, coveralls and other protective clothing as necessary to prevent contact:

## First Aid:

**Inhalation:** Move to Fresh air. Aid in breathing, if necessary, and get immediate medical attention.

**Ingestion:** If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

**Skin Contact:** Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.

**Eye Contact:** Immediately wash affected area with running water for 15 minutes. If irritation develops, consult a physician.

**IN CASE OF FIRE:** USE FOG WATER EXTINGUISHING MEDIA Firefighters should be equipped with self-contained breathing apparatus and turnout gear

## Fire and explosions

### hazards:

OXIDIZING

MODERATE WHEN EXPOSED TO HEAT OR FLAMES. CAN REACT WITH MATERIAL

**Empty containers:** All labeled precautions must be observed when handling, storing or transporting empty containers due to product residues. Do not reuse this container unless it is professionally cleaned and reconditioned.

**Disposal:** Spilled material, unused material/contents and empty containers must be disposed of in accordance with local, state and federal regulations. Refer to

Safety Data Sheet for specific disposal instructions.

Material

**CAS NO. 75-12-7**