



**PhytoTechnology
Laboratories®**

SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Formamide (deionized)
 PRODUCT NUMBER: F3039
 COMPANY INFO: *PhytoTechnology Laboratories®*
 PO Box 12205, Shawnee, KS 66282-2205
 Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442
 www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only
 1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories®* are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

- H351 – Carcinogenicity (Category 2)
- H360 – Reproductive toxicity (Category 1B)
- H373 – Specific target organ toxicity – repeated exposure – Oral - Blood (Category 2)

GHS Label elements, including hazard and precautionary statements:



Signal Word: **Danger**

Hazard Statements:

- H351 – Suspected of causing cancer.
- H360 – May damage fertility or the unborn child.
- H373 – May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.

Precautionary Statements:

- P202 – Do not handle until all safety precautions have been read and understood.
- P260 – Do not breathe dust.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313 – If exposed or concerned. Get medical attention/advice.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Methanamide, carbamaldehyde
 CAS No.: 75-12-7
 Formula: CH₃NO
 Molecular Weight: 45.04 g/mol
 EC No.: 200-842-0

Ingredient	CAS Number	Percent	Hazardous
Formamide	75-12-7	100%	Included in the Candidate List of Substances of Very High Concern (SVHC)

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special Protective Equipment and Precaution for Firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

Hazardous Combustion Products: May emit toxic fumes under fire conditions.

Toxic Gases Produced: Carbon oxides, nitrogen oxides

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Method of Containment and Cleanup: Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let products enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

Incompatibilities: Strong oxidizing agent

Recommended Storage Temperature: 2-6 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

NIOSH Recommended Exposure Limits: 10 ppm, 15 mg/m³

ACGIH Threshold Limit Values (TLVs): 10 ppm

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin Protection: Protective gloves

Body Protection: Lab coat

Respiratory Protection: Appropriate respirator

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

pH: No data available

Solubility: No data available

Melting Point: No data available

Vapor Density: 1.56 - (Air = 1.0)

Vapor Pressure: 0.08 hPa (0.06 mmHg) at 20 °C (68 °F)

Odor: Ammonia odor

Odor Threshold: No data available

Viscosity: No data available

Relative Density: 1.134 g/mL at 25 °C (77 °F)

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: 210 °C (410 °F)

Flammability (solid, gas): No data available

Partition coefficient: log Pow: -0.819 at 25 °C (77 °F)
n-octanol/water):

Auto-ignition Temperature: No data available

Decomposition Temperature: > 180 °C (> 356 °F)

Flash Point (Closed Cup): 175 °C (347 °F)

Flammable Limits: Upper (%) – 19 %(V) Lower (%) – 2.7 %(V)

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use

Possibility of Hazard Reactions: Will not occur

Conditions to Avoid: Moisture

Incompatibles Materials: Strong oxidizing agents

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Toxicity: LD₅₀ (Oral-Rat)(mg/Kg): 5,325

LD₅₀ (Oral-Mouse)(mg/Kg): No data available

LD₅₀ (Dermal-Rabbit)(mg/Kg): >3,000

Carcinogenicity	Suspected human carcinogens	
	NTP:	No
	IARC:	No
	ACGIH:	No
	OSHA Reg:	No
Reproductive toxicity:	Presumed human reproductive toxicant	
Symptoms Associated with Overexposure:	Gastrointestinal disturbance	
Specific Target Organ Toxicity:	Single Exposure:	No data available
	Repeated Exposure:	Oral - May cause damage to organs through prolonged or repeated exposure. - Blood
Target Organs:	Blood	
Medical Conditions Aggravated By Exposure:	None identified	
Routes of Entry:	Inhalation, Ingestion	
NIOSH/RTECS NO:	LQ0525000	

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxicity to fish static test LC50 - <i>Leuciscus idus</i> (Golden orfe) - 6,569 mg/l - 96 h	
	Toxicity to daphnia - static test EC50 - <i>Daphnia magna</i> (Water flea) - > 500 mg/l - 48 h	
	Toxicity to algae - static test EC50 - <i>Desmodesmus subspicatus</i> (green algae) - > 500 mg/l - 72 h	
	Toxicity to bacteria - Respiration inhibition EC50 - Sludge Treatment - > 1,000 mg/l - 30 min (OECD Test Guideline 209)	
Persistence and Degradability:	No data available	
Bioaccumulative Potential:	Readily biodegradable	
Mobility in Soil:	No data available	
Other Adverse Effects:	Product does not contain any organic halogens.	

13. DISPOSAL CONSIDERATION

Disposal Procedure:	Dispose in accordance with all applicable federal, state, and local environmental regulations.
EPA Hazardous Waste Number:	No data available

14. TRANSPORT INFORMATION

Domestic (D.O.T.):	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)
	Hazard Class:	N/A
	UN/NA:	N/A
	Labels:	N/A
International:		
IMDG:	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)
	Hazard Class:	N/A
	UN/NA:	N/A
	Labels:	N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)
 Hazard Class: N/A
 UN/NA: N/A
 Labels: N/A

15. REGULATORY INFORMATION

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No
 Section 313 Ingredients: No
 Section 304 (EHS/CERCLA) Ingredients: No
 Section 311/312 Hazard: Chronic Health Hazard

Massachusetts Right to Know Components: CAS No.: 75-12-7 Formamide

Pennsylvania Right to Know Components: CAS No.: 75-12-7 Formamide

New Jersey Right to Know Components: CAS No.: 75-12-7 Formamide

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
	0	*	1	0
NFPA Rating:	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
	2	1	0	

*Chronic Hazard: Chronic (long-term) health effects may result from repeated overexposure.

***PhytoTechnology Laboratories®* provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. *PhytoTechnology Laboratories®* shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

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