

# SAFETY DATA SHEET

## Section 1: Identification

**Product Name:** Formamide

**Chemical Name/Synonyms:** Carbamaldehyde; Methanamide.

**CAS No:** 75-12-7

**Product Use:** Intended for research and development

**Product Restrictions:** Not intended for food, drug, cosmetic, pesticide, or medical device

**Company:**

FTF Scientific LLC

9601 North Palafox Street, Suite 12

Pensacola, Fl 32534

**In emergency call 911.**

**For information about this SDS, use this contact phone#:** 720-621-7160

## Section 2: Hazard(s) Identification

**Hazard Classification:**

Carcinogenicity (Category 2), H351

Reproductive toxicity (Category 1B), H360

Specific target organ toxicity - repeated exposure, Oral (Category 2), Blood, H373

**Signal Word(s):**

Danger

**Hazard Statements:**

Suspected of causing cancer

May damage fertility. May damage the unborn child

May cause damage to organs through prolonged or repeated exposure

**Pictograms:**



**Precautionary Statements:**

**Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

**Response**

IF exposed or concerned: Get medical attention/advice

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Description of other hazards:**

None identified

### Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
Formamide	Amide C1 Formic amide	75-12-7	99+

### Section 4: First-Aid Measures

**General Advice:**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**After skin contact:**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**After eye contact:**

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**After inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**After swallowing:**

Do NOT induce vomiting. Call a physician or poison control center immediately.

**Most important symptoms and effects:**

None reasonably foreseeable.

**Notes to Physician:**

Treat symptomatically



### Section 5: Fire-Fighting Measures

**Suitable extinguishing agents:**

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### Section 6: Accidental Release Measures

**Personal precautions:**

Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Measures for environmental protection:**

Should not be released into the environment.

**Measures for cleaning/collecting:**

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### Section 7: Handling and Storage

**Handling:**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

**Storage:**

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Acids. Bases. Strong oxidizing agents.

### Section 8: Exposure Controls/Personal Protection

Chemical Name	OSHA PEL	OSHA PEL (ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Formamide	(Vacated) TWA: 20 ppm (Vacated) TWA: 30 mg/m <sup>3</sup> (Vacated) STEL: 30 ppm (Vacated) STEL: 45 mg/m <sup>3</sup>			



**General protective and hygienic measures:**

Handle in accordance with good industrial hygiene and safety practice

**Breathing equipment:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Protection of hands:**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Eye protection:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Section 9: Physical and Chemical Properties**

**Form:** viscous liquid

**Odor:** Ammonia-like

**Odor threshold:** N/A

**pH:** 4-5 200 g/l aq.sol

**Melting point/melting range:** 2 - 3 °C / 35.6 - 37.4 °F

**Boiling point/boiling range:** 210 °C / 410 °F

**Flash point:** 175 °C / 347 °F

**Evaporation rate:** N/A

**Flammability:** N/A

**Upper/lower flammability or explosive limits:**

Upper explosion limit: 19 %(V) Lower explosion limit: 2.7 %(V)

**Auto ignition temperature:** 500 °C / 932 °F

**Danger of explosion:** No Data Available

**Vapor pressure:** 0.08 hPa at 20 °C (68 °F)

**Vapor density:** 1.56 - (Air = 1.0)

**Relative density:** No data available

**Solubility in/Miscibility with water:** completely miscible

**Section 10: Stability and Reactivity****Reactivity:**

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

**Chemical stability:**

Stable under normal conditions.

**Conditions to avoid:**

Excess heat. Incompatible products.



**Incompatible materials:**

Acids, Bases, Strong oxidizing agents

**Hazardous decomposition products:**

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen cyanide (hydrocyanic acid), Ammonia

**Section 11: Toxicological Information****Acute toxicity:**

LD50 Oral - Rat - male and female - 5,325 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male - 4 h - > 21 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 3,000 mg/kg Remarks: (ECHA)

No data available

**Potential routes of exposure/potential health effects**

**Skin:** No skin irritation

**Eye:** slight irritation

**Inhalation:** N/A

**Ingestion:** N/A

**Carcinogenic effects:** Possible cancer hazard. May cause cancer based on animal data.

**Mutagenic effects:** Not mutagenic in AMES Test

**Reproductive toxicity:** May cause harm to the unborn child. Possible risk of impaired fertility.

**Sensitization:** N/A

**Target organs:**

**Specific target organ toxicity - single exposure** No data available

**Specific target organ toxicity - repeated exposure** Oral - May cause damage to organs through prolonged or repeated exposure. - Blood

**Section 12: Ecological Information (non-mandatory)****Ecotoxicity:**

Fish - static test LC50 - Leuciscus idus (Golden orfe) - 6,569 mg/l - 96 h (DIN 38412 part 15)

Daphnia and other aquatic invertebrates - static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2)

Algae - static test ErC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l -96h (DIN 38412)

Bacteria - static test EC50 - activated sludge - > 1,000 mg/l - 30 min (OECD Test Guideline 209)

**Mobility:** Will likely be mobile in the environment due to its water solubility.

**Biodegradation:** Persistence is unlikely

**Bioaccumulation:** N/A



### Section 13: Disposal Considerations (non-mandatory)

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### Section 14: Transport Information (non-mandatory)

**DOT regulations:** Not Classified Dangerous Goods

**IMDG:** Not Classified Dangerous Goods

**IATA:** Not Classified Dangerous Goods

### Section 15: Regulatory Information (non-mandatory)

#### US Federal Regulations

**SARA Section 355 (extremely hazardous substances):** N/A

**SARA Section 313 (specific toxic chemical listings):** N/A

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs):** N/A

**TSCA (Toxic Substances Control Act):** N/A

### Section 16: Other Information

The above information is as accurate as can be provided however this does not represent the full guarantee of the properties of product. FTF Scientific LLC shall not be held liable for any damage resulting from handling or contact of the above product.

**SDS date of preparation/update:** January 26th, 2023

