

**MSDS****Material Safety Data Sheet****EVER Scientific™**

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TELEPHONE NUMBER  
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**FORMALIN SOLUTION 10% Neutral Buffered  
MATERIAL SAFETY DATA SHEET**

The following information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.

**Product Identification**

Product Name: 10% Neutral Buffered Formalin  
 Product Code: NBF-4-G, CUNBF-2.5-G, CUNBF-5-G  
 Product Description: A buffered aqueous solution of formaldehyde and methanol

**Section 1 - Shipping Data**

DOT Shipping Name:\* Ground shipments Not regulated Tel. # for information: (610) 524-5810  
 DOT Hazard Class: Not applicable Emergency Tel. #: (800) 424-9300  
 DOT Identification: Not applicable Prepared by: P.B.

**Section 2 - Hazardous Ingredients / Identity Information**

CHEMICAL COMPONENTS	CAS#	%	OSHA PEL	ACGIH TLV
Formaldehyde	50-00-0	3-4%	0.75 ppm TWA	0.3 ppm CEIL 2 ppm STEL
Methyl Alcohol	67-56-1	~1%	200 ppm TWA	250 ppm STEL Skin 200 ppm TWA Skin

Formaldehyde and Methyl Alcohol are subject to the reporting requirements of SARA 313 and 40CFR372.

**Section 3 - Physical / Chemical Characteristics**

Boiling Point: N/E Specific Gravity (H<sub>2</sub>O = 1): N/E  
 Vapor Pressure (mm Hg and Temperature): N/E Evaporation Rate ( *n-butyl alcohol* = 1): N/E  
 Vapor Density (AIR=1): N/E Solubility in Water: Miscible  
 Appearance and Odor: Clear, colorless liquid. Characteristic odor of formaldehyde.

**Section 4 - Fire and Explosion Hazard Data**

NFPA Ratings: (Estimated) HEALTH: 2 FIRE: 1 REACTIVITY: 0  
 Flash Point (Method Used): Not Combustible. Flammability Limits: Not applicable  
 Extinguishing Media: Dry Chemical, carbon dioxide or alcohol type foam suitable for surrounding fire.  
 Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus with full face piece operated in pressure-demand or other positive-pressure mode.  
 Unusual Fire and Explosive Hazards: N/I

**Section 5 - Reactivity Data**

**Stability:** Stable above 10C. **Conditions to Avoid:** Low temperatures.  
**Incompatibility (Materials to Avoid):** Strong oxidizers, strong alkalis, acids, phenol and urea.  
**Hazardous Decomposition products:** CO, CO<sub>2</sub>, Formaldehyde.  
**Precautions to be taken in Handling and Storage:** Store at room temperature. Do not freeze.

### Section 6 - Health Hazard Data

Routes of Entry	Inhalation?	Skin Absorption?	Ingestion?
	yes	yes	yes
Carcinogenicity?	NTP?	IARC Monographs?	OSHA Regulated?
yes	no	yes	yes

**Health Hazards (Acute and Chronic):** Eye contact causes irritation. Inhalation can cause irritation to the respiratory tract. Frequent skin contact leads to drying and scaling. Ingestion will damage the throat, stomach and intestines resulting in nausea, vomiting, abdominal pain and diarrhea. Lowered blood pressure, spontaneous abortion, loss of consciousness and kidney damage may result. Inhalation of high concentrations of vapor (14 ppm) have caused cancer in laboratory animals. Genetic damage in bacteria has been demonstrated.

**Medical Conditions Generally Aggravated by Exposure:** People who regularly work with formaldehyde are required to have regular medical surveillance.

**Emergency and First Aid Procedures:** *Seek medical assistance for further treatment, observation and support if necessary.*

**Eye Contact:** Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately.

**Skin Contact:** Remove contaminated clothing and flush with water.

**Ingestion:** Dilute immediately with water or milk. Induce vomiting followed by a slurry of activated charcoal. Do not induce vomiting if patient is unconscious or drowsy, contact physician.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Contact physician.

**All other means of exposure:** Contact poison control center immediately. Be prepared to provide hazardous ingredient information.

### Section 7 - Precautions For Safe Handling and Use

**Steps to be Taken In Case of Spill Or Release:** Absorb with a suitable absorbent (such as paper towel) and dispose.

**Waste Disposal Methods:** The disposal of formaldehyde is usually restricted. Incineration is the preferred method of disposal. Waste water disposal permits sometimes allow small quantities to be flushed down drain with excess water. Insure compliance with all government regulations.

### Section 8- Control Measures

**Respiratory Protection (Specify Type):** Recommended.

**Ventilation:** Use local mechanical exhaust such as a chemical fume hood.

**Protective Gloves:** Use rubber or plastic gloves that are impervious to formaldehyde.

**Eye Protection:** Laboratory safety goggles or similar products are recommended as part of good laboratory practice.

**Other Protective Clothing And Equipment:** Use chemical resistant clothing.

**Hygienic Work Practices:** Wash well after handling, especially before eating and smoking.

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