

IDENTITY (As Used on Label and List)**Dilute Formalin Fixative (Residual in Preserved Specimens)****Section I**

Manufacturer's Name Ward's Natural Science Establishment	Emergency Telephone Number Chemtrec 800-424-9300
Address (Number, Street, City, State, and ZIP Code) 5100 West Henrietta Road Rochester, NY 14692-9012	Telephone Number for Information 800-962-2660
	Date Prepared November 6, 2003
	Signature of Preparer (Optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits	%
Formalin	50-00-0	0.75ppm	0.75ppm		1% to 4%
Water	7732-18-5	N/A	N/A		96-99%
Formalin is present in specimen tissues as a result of initial fixation.					
Traces of fixative may also be present as residual leachate in packing fluid.					

Section III - Physical/Chemical Characteristics

Boiling Point	>100C (210F)	Specific Gravity (H₂O = 1)	<1.0
Vapor Pressure (mm Hg.)	>1.0	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate n-butyl acetate = 1	<1

Solubility in Water

Completely soluble

Appearance and Odor

Clear liquid, may be discolored by body fluids to yellow, brown, or red. Pungent, acrid odor.

Section IV - Fire and Explosion Hazard

Flash Point <i>(Method Used)</i> >180F	Flammable Limits	LEL N/A	UEL N/A
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Extinguishing Media

Use best media for surrounding fire.

Special Fire Fighting Procedures

No special procedures.

Unusual Fire and Explosive Hazards

Non-combustible liquid. No unusual hazards.

Section V - Reactivity Data

Stability	Unstable	No	Conditions to Avoid
	Stable	Yes	Strong oxidizing agents.

Incompatibility *(Materials to Avoid)*

Hazardous Decomposition or Byproducts

Formaldehyde gas, carbon dioxide, and carbon monoxide.

Hazardous Polymerization	May Occur	No	Conditions to Avoid Strong oxidizing agents.
	Will Not Occur	Yes	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Not likely
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Health Hazards *(Acute and Chronic)*

. Health hazards may include irritation of respiratory tract and nasal passages from formaldehyde gas; dryness and irritation of skin may occur with contact. May cause allergic skin reaction or transient dermatitis in some individuals. Prolonged exposure may lead to cancer, depending on length and level of exposure. Human evidence is inconclusive. Tumors have been induced in rats exposed to high concentrations (>10ppm) for prolonged periods.

Carcinogenicity:	NTP? No	IARC Monographs? A2 potential carcinogen	OSHA Regulated? Yes
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Signs and Symptoms of Exposure

Dilute solution is a low level hazard. Irritation of skin and eyes possible with contact.

Medical Conditions Generally Aggravated by Exposure

Chemical hypersensitivity and pre-existing respiratory conditions may be aggravated by exposure.

Emergency and First Aid Procedures

Inhalation: remove to fresh air. Give oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Get medical attention. Eyes: Flush thoroughly with water, including upper and lower lids. If irritation persists, get medical attention. Skin: Wash thoroughly if contact occurs. Ingestion: Induce vomiting. Get medical attention immediately.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Material may be flushed to drain if local regulations permit. Provide adequate ventilation in spill area.

Waste Disposal Method

Discharge, treatment, and disposal may be subject to state and local regulations.

Precautions to be Taken in Handling and Storage

Use protective gear required. Provide adequate ventilation.

Other Precautions

For lab use only. Not for drug, food, or cosmetic use. Keep out of reach of children. Supervise activities conducted with specimens. Avoid prolonged breathing of vapors. Keep away from heat, sparks, or open flames. Keep containers tightly closed. Remove and wash contaminated clothing.

Section VIII - Control Measures

Respiratory Protection *(Specify Type)*

Not needed under normal laboratory conditions with adequate ventilation. PEL is 0.75ppm STEL 2.0 ppm

Ventilation	Local Exhaust Recommended	Special None required
	Mechanical Recommended	Other Adequate to maintain below exposure level
Protective Gloves	Recommended	Eye Protection Recommended

Other Protective Clothing or Equipment

Lab coat, apron, and eyewash station in close proximity to work area.

Work/Hygenic Practices

Wear protective equipment. Wash hands thoroughly after use.

FOR ADDITIONAL INFORMATION:

Contact Ward's Safety Manager during business hours at (800) 962-2660.

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