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MATERIAL SAFETY DATA SHEET

MSDS No.: FF0269
Effective Date: January 10, 2007

SECTION I NAME

Product	Formalin Solution 10%
Chemical Synonyms	N/A
Formula	Mixture.
Unit Size	up to 3.785 Lt.
C.A.S. No.	Mixture.

24 HOUR EMERGENCY ASSISTANCE

	CHEMTREC 800-424-9300 Day 585-226-6177	<table border="1"> <tr> <td>Health</td> <td>2</td> </tr> <tr> <td>Fire</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health	2	Fire	0	Reactivity	0
	Health	2						
Fire	0							
Reactivity	0							
NFPA HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE 0 1 2 3 4	HMIS *							

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Formaldehyde: (CAS No. 50-00-0)	3.70%	TWA: 0.3 ppm; 0.37 mg/m ³
Methyl alcohol: (CAS No. 67-56-1)	1.2%	TWA: 200 ppm; 262 mg/m ³
Water: (CAS No. 7732-18-5)	95.1%	None established.

WARNING! HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes approx. 0°C (68°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	> 1
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; strong irritating aldehyde odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use water spray; dry chemical; foam; carbon dioxide.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Wear goggles if eye protection is not provided.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from this solution, which may cause hazardous decomposition products to be produced as dust or fume.

SECTION V HEALTH HAZARD DATA

FF0269

Threshold Limited Value

Methanol: STEL 250 ppm, 328 mg/m³

Effects of Overexposure

Toxic effects are mainly those of irritation. If swallowed it causes violent vomiting and diarrhea which can lead to collapse. Frequent or prolonged exposure can cause hypersensitivity. Exercise appropriate procedures to minimize potential hazards. Target organs: Eyes, central nervous system, liver, kidneys.

Emergency and First Aid Procedures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature to cause evaporation.
	Stable	X		
Incompatibility (Materials to Avoid)		Strong acids, phenols, strong oxidizers, hydrochloric acid, ammonia, iodine, alkalis, tannin, iron products, gelatin, bisulfite.		

Hazardous Decomposition Products Thermal decomposition or burning may produce irritating formaldehyde vapor or carbon monoxide.

Hazardous Polymerization		Conditions to Avoid	Not applicable.
May Occur	Will Not Occur		
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Absorb spill with an inert dry material and place in a suitable container for disposal. Flush spill area with water. Wash with dilute ammonia solution to remove any residual odor.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved incinerator equipped with an afterburner and scrubber or in an approved chemical landfill. If at-site treatment or disposal facility are not available, contract with a licensed waste disposal agency.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	For laboratory use work in fume hood or wear NIOSH/MSHA-approved cartridge respirator for organic vapors.			
Ventilation	Local Exhaust	Yes.	Special	No.
	Mechanical (General)	Yes.	Other	Adequate to maintain below exposure limit.
Protective Gloves	Rubber.		Eye Protection	Splash proof goggles or face shield.
Other Protective Equipment	Lab coat, apron, goggles, gloves, eye wash station, ventilation hood, fire extinguisher.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry place. Keep away from heat and flame. Avoid breathing vapors or mist. Avoid contact with skin and clothing. Wash thoroughly after handling.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Remove and wash contaminated clothing before reuse.

D.O.T. NON REGULATED

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

Revision No. 5 | Date 01/10/07 | Approved James A. Bertsch | Chemical Safety Coordinator JAB

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