

# Material Safety Data Sheet (F1)

IDENTITY (As Used on Label and List)

**FORMALIN FIXED SPECIMEN(S)** (Excluding Fetal Pigs, Cats, Rabbits, Mink, Grassfrogs, Bullfrogs)

**Section I**

<b>Manufacturer's Name</b> RANACO CORPORATION <b>Address (Number, Street, City, State, and ZIP Code)</b> 4345 E. Irvington Road Tucson, AZ 85714	<b>Emergency Telephone Number</b> 24HR Assistance CHEMTREC: 1-800-424-9300 <b>Telephone Number for Information</b> 1-800-528-7023 (Arizona Time 8am-5pm) <b>Date Prepared</b> August 7, 2003 <b>Signature of Preparer (Optional)</b>
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**Section II – Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% Optional
Formalin, 3.7% Formaldehyde	50-00-0	.075 PPM	0.3 PPM	STEL 2 PPM Action Level 0.5 PPM	≤ 0.6
Methanol 1.2%	67-56-1	200 PPM	200 PPM	STEL 250PPM (Skin)	≤ .001
S 400 2100					
S 18755 50					
S 400 250					
S 920 350					
S 900 2100					
S 900 210					
S 900 250					
S 170510					
S 18755 100					
S 920 310					
S 170750					
S 17125					
S 400 210					
S 170550					
S 920 3100					
S 170710					

**Section III – Physical/Chemical Characteristics**

Boiling Point	>214 °C	Specific Gravity (H <sub>2</sub> O = 1)	<1.08
Vapor Pressure (mm Hg.)	>1.0	Melting Point	N/A
Vapor Density (AIR = 1)	Unknown	Evaporation Rate Butyl Acetate = 1	<1.0
Solubility in Water	Complete		
Appearance and Odor	Specimens with mild chemical odor.		

**Section IV – Fire and Explosion Hazard Data**

Flash Point (Method Used)	Flammable Limits	LEL	UEL
185°F		7%	73%
Extinguishing Media	Use dry chemical, CO <sub>2</sub> or alcohol foam.		
Special Fire Fighting Procedures	Wear fire fighting protective equipment and a self-contained breathing apparatus. Use best method for surrounding fire conditions.		
Unusual Fire and Explosive Hazards	N/A		

**Section V – Reactivity Data**

Stability	Unstable		Conditions to Avoid Strong oxidizing agent; excessive heating
	Stable	X	
Incompatibility (Materials to Avoid) Strong oxidizing, alkalis and acids, phenols, urea, oxides, isocyanates, caustics, anhydrides			
Hazardous Decomposition or Byproducts Formaldehyde gas, carbon monoxide and carbon dioxide			
Hazardous Polymerization	May Occur		Conditions to Avoid Non-hazardous polymerization may occur at low temperatures causing the formation of paraformaldehyde, a white solid.
	Will Not Occur	X	

**Section VI – Health Hazard Data**

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic) May cause respiratory irritation. Skin & Eye: Liquid and vapor may cause irritation. Ingestion: Toxic			
Carinogenicity: Formaldehyde is probably carcinogenic to humans on the basis of animal evidence. Listed by ACGIH as an A2 industrial substance suspect of carcinogenic potential for man. OSHA does not currently regulate formaldehyde as a carcinogen.	NTP?	IARC Monographs?	OSHA Regulated? No
Signs and Symptoms of Exposure Irritation of respiratory tract, eyes and skin.			
Medical Conditions Generally Aggravated by Exposure Repeated skin exposure may cause dermatitis or other allergic reactions.			
Emergency and First Aid Procedures <b>SKIN:</b> Wash with soap and water for 15 minutes. <b>EYES:</b> Wash with water for 15 minutes. <b>INHALATION:</b> Remove to fresh air. <b>INGESTION:</b> Seek medical attention. Seek medical attention if any of the above symptoms persist.			

**Section VII – Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material is Released or Spilled Ventilate area of spill. Eliminate all sources of ignition. Remove non-essential personnel. Wear proper protective equipment and clothing. Absorb material with suitable absorbent and place in appropriate container for disposal. Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste.			
Waste Disposal Method Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.			
Precautions to Be Taken in Handling and Storage Store at room temperature in a dry, well-ventilated place. Keep specimen container tightly closed when not in use. Wash thoroughly after handling.			
Other Precautions Do not get in eyes, on skin, or on clothing. Do not ingest. Even those containers that have been emptied will retain product residue and vapors. Obey hazard warnings and handle empty containers as if full. Do not cut, grind, weld or drill on or near this container.			
<b>Section VIII – Control Measures</b>			
Respiratory Protection (Specify Type) Normal classroom use with adequate ventilation does not require the use of special respiratory protection. If use conditions generate formaldehyde fumes above the OSHA regulations, use of a respirator is required.			
Ventilation	Local Exhaust	Special	
	Mechanical Mechanical room ventilation.	Other	
Protective Gloves	Gloves are recommended.	Eye Protection	Chemical goggles unless a full-face piece respirator is also worn. It is generally recognized that contact lenses may contribute to the severity of an eye injury.
Other Protective Clothing or Equipment Long sleeved shirt, trousers, and safety shoes.			
Work/Hygienic Practices Eye wash station and safety showers should be available in the immediate vicinity of any potential exposure.			

**FOR ADDITIONAL INFORMATION**  
**Contact Ranaco's Safety Manager during business hours at (520) 790-7737**

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