

Material Safety Data Sheet (FAA)

IDENTITY (As Used on Label and List)
FAA FIXED EARTHWORMS AND BOTANICAL SPECIMENS Distributor
SARGENT-WELCH

Section I

Manufacturer's Name RANACO CORPORATION	Emergency Telephone Number 24HR Assistance CHEMTREC: 1-800-424-9300
Address (Number, Street, City, State, and ZIP Code) 4345 E. Irvington Road Tucson, AZ 85714	Telephone Number for Information 1-800-528-7023 (Arizona Time 8am-5pm)
	Date Prepared April 25, 2002
	Signature of Preparer (Optional)

Section II – Hazardous Ingredients/Identity Information

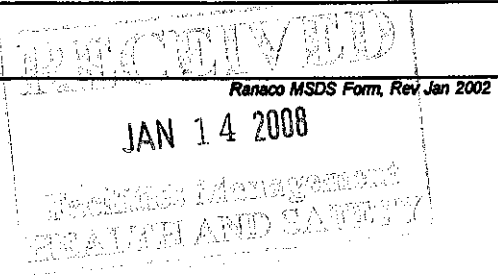
Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% Optional
Formalin, 37% Formaldehyde	50-00-0	.075 PPM	0.3 PPM	STEL 2 PPM Action Level 0.5 PPM	≤ 0.1
Methanol 12%	67-56-1	200 PPM	200 PPM	STEL 250PPM (Skin)	
Isopropyl Alcohol	67-63-0	400 PPM	400 PPM	None Recommended	≤0.5
Glacial Acetic Acid	64-17-7	10 PPM		IDLH 50 PPM	

Section III – Physical/Chemical Characteristics

Boiling Point	>82 °C	Specific Gravity (H₂O = 1)	Unknown
Vapor Pressure (mm Hg.)	>1.0	Melting Point	N/A
Vapor Density (AIR = 1)	Unknown	Evaporation Rate Butyl Acetate = 1	Unknown
Solubility in Water Complete			
Appearance and Odor Specimens with mild chemical odor.			

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) Formaldehyde: 185 °C Isopropyl Alcohol: 11.7 °C	Flammable Limits	LEL Formaldehyde 7.0 Isopropyl Alcohol 2.0	UEL Formaldehyde 7.3 Isopropyl Alcohol 12.0
Extinguishing Media Use dry chemical, CO ₂ 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			



Ranaco MSDS Form, Rev Jan 2002

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid Strong oxidizing agent; excessive heating, open flames
	Stable	X	

Incompatibility (Materials to Avoid)

Strong oxidizing, alkalis and acids, phenols, urea, oxides, isocyanates, caustics, anhydrides, aluminum equipment above 120° F

Hazardous Decomposition or Byproducts

Formaldehyde gas, carbon monoxide and carbon dioxide and unidentified organics

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

May cause respiratory irritation and central nervous system depression. Skin & Eye: Liquid and vapor may cause irritation. Ingestion: Toxic, CNS depression

Carcinogenicity:

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

Eye, skin, respiratory and gastrointestinal tracts irritation, headache, dizziness, nausea, loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

Medical Conditions Generally Aggravated by Exposure

Repeated skin exposure may cause dermatitis or other allergic reactions. Persons with pre-existing disorders, eye problems or impaired liver or respiratory function may be more susceptible to the effects of this product.

Emergency and First Aid Procedures

SKIN: Wash with soap and water for 15 minutes. **EYES:** Wash with water for 15 minutes. **INHALATION:** Remove to fresh air. **INGESTION:** 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.

Section VIII – Control Measures**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
	Ventilation to maintain exposure below TLV(s)	
	Mechanical	Other
	Below TLV(s)	

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.
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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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