

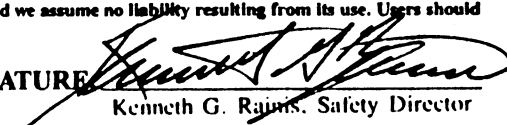
Ward's Natural Science  
 5100 W. Henrietta Road  
 P.O. Box 92912  
 Rochester, New York 14692-9012

Phone: (716) 359-2502  
 Emergency: (716) 342-4751  
 (After Business Hours)

MSDS No. 694  
 (Revision)  
 Effective Date: 4/86

*Last Co. 8/8*

<b>SECTION I. MATERIAL IDENTIFICATION</b>		<b>REVIEWED:</b> 4/86 KGR	
Material Name: <u>WARD-SAFE II</u>		Catalog Number(s): 62 W Series	
Note: Holding solution for Dissection Materials		68 W Series	
Note: Dissection specimens originally fixed using formaldehyde-based fixative. See Sec.IX		69 W Series	
CAS Number: (Mixture)			
<b>SECTION II. INGREDIENTS AND HAZARDS</b>		<b>%</b>	<b>HAZARD DATA</b>
Substances listed are those identified as present at a concentration of 1% or greater, or 0.1% if the substance is a potential carcinogen cited in OSHA Hazard Communication Standard. Where proprietary ingredient shows, the identity of this substance may be made available as provided in 29 CFR 1910.1200 (f).			
Proprietary Information: 1,2 - Propanediol		< 2	OSHA (not listed) Oral Rat=LD <sub>50</sub> =20gm/Kg Skin (human) 50%/2 d. (irritation)
Methanol (methyl alcohol)		< 3	200ppm (OSHA/ACGIH)
Water (remainder by volume-except for other proprietary components as stated above)			
<b>SECTION III. PHYSICAL DATA</b>		<b>SINGLE SUBSTANCE</b> <input type="checkbox"/> <b>MIXTURE</b> <input checked="" type="checkbox"/>	
Boiling Point: °F 1.760mm--About 210°		Solubility In Water: Infinite	
Vapor Pressure: N/A		Percent volatile by volume: About 3%	
Vapor Density: Approx. 1.5 (water=1.0)			
Specific Gravity: About 1.0			
Appearance and Odor: Clear, mobile fluid; almond odor.			
<b>SECTION IV. FIRE AND EXPLOSION DATA</b>		<b>FLAMMABLE MATERIAL</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Flash Point</b>	<b>Auto Ignition Temp.</b>	<b>Flammability Limits In Air</b>	
N/A	N/A	N/A	
		<b>LOWER</b>	<b>UPPER</b>
		N/A	N/A
Extinguishing Media: <input checked="" type="checkbox"/> Use Best For Surrounding Fire, or <input type="checkbox"/> See Below:			
Fire and Explosion Hazards: <input checked="" type="checkbox"/> None <input type="checkbox"/> See Below:			
<b>SECTION V. REACTIVITY DATA</b>			
Stability: <input checked="" type="checkbox"/> Stable, Will Not Undergo Hazardous Polymerization <input type="checkbox"/> Unstable			
Incompatibility: (Conditions to avoid): Oxidizing materials or heavy metals.			
Hazardous Decomposition Products: Normal products of combustion (at thermal decomposition)--carbon monoxide, carbon dioxide and water.			

<b>SECTION VI. HEALTH HAZARD INFORMATION</b>		<b>TLV (See Sect. II)</b>
<p><b>Effects of Overexposure:</b> Cannot be made non-poisonous, contains methanol. Vapor may cause eye and skin irritation. Prolonged skin contact may cause skin irritation to persons with sensitive skin. Generally irritation is transient.</p>		
<p><b>First Aid Procedures:</b> See Addendum Sheet for further information</p> <p><b>Eye Contact:</b> Flush with water for 15 minutes, including under eyelids.</p> <p><b>Skin Contact:</b> Wash with soap and water. Contact physician if irritation condition persists.</p> <p><b>Ingestion:</b> Cannot be made non-poisonous! Contains methanol. Can affect optic nerve resulting in blindness. Induce vomiting of conscious person by giving 2 glasses of water and pressing finger down throat. Contact physician immediately.</p>		
<b>SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES</b>		
<p><b>Small Spills:</b> Wipe up.</p> <p><b>Large Spills:</b> Absorb onto sorbent material; discard as solid waste if local regulations permit.</p>		
<p><b>Disposal:</b> Material may be diluted (2:1) with water and flushed to sanitary sewer if local regulations permit.</p> <p>Always dispose through approved TSD facility according to federal, state, and local regulations.</p>		
<b>SECTION VIII. SPECIAL PROTECTION INFORMATION</b>		<b>EXPOSURE GUIDELINES:</b>
<p><b>Ventilation:</b> Good general ventilation is recommended. Local exhaust ventilation may be necessary in some dissection conditions.</p> <p><b>Respiratory Protection:</b> Not indicated.</p> <p><b>Skin Protection:</b> Plastic or rubber gloves are recommended. Avoid prolonged skin contact.</p> <p><b>Eye Protection:</b> Safety glasses or goggles recommended. Contact lenses should not be worn when handling this material.</p>		
<b>SECTION IX. SPECIAL HANDLING PRECAUTIONS AND COMMENTS</b>		<b>DOT CLASS:</b> N/A
<p><input checked="" type="checkbox"/> See Addendum Sheet For Additional Technical Information.</p>		
<p>The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine suitability of the information for their particular purposes.</p>		
REV. #: 002	DATE: June, 1986	SIGNATURE:  Kenneth G. Rainis, Safety Director

## ADDENDUM SHEET WARD-SAFE II

SECTION VI. HEALTH HAZARD INFORMATION

## First Aid Procedures:

Skin Absorption: Repeated exposure may cause local irritation; wash affected areas with soap and water. Contact physician if irritation persists.

Inhalation: At room temperatures, exposure to material vapors is minimal; however, other fixative vapors may be present.

SECTION IX. SPECIAL HANDLING PRECAUTIONS AND COMMENTS-DOT CLASS N/A

## Technical Information:

Avoid ingestion! Avoid prolonged skin contact. Practice reasonable caution and personal cleanliness. Use of apron or smock during dissection activities recommended.

Eye wash station near dissection activities recommended.

See attached Addendum Sheet for additional information concerning the use of our dissection material products.

Refer to MSDS #153 (5% Formalin Solution) or MSDS #154 (Embalming Solution) for further information regarding these solutions as primary fixatives, also 694 A Preserved Materials Addendum Sheet.

MSDS status--superceeds 3/81; Sections I--IX revised.

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine suitability of the information for their particular purposes.

REV.# 002

DATE: June 1982

SIGNATURE: 

(Safety Director)

## ADDENDUM SHEET Preserved Materials

**Recommended Safety Practices:** When handling and dissecting our preserved material products, students should be supervised and be instructed on these procedures before beginning work.

1. Rubber gloves should be worn at all times by persons handling preserving fluids, preserved specimen material, and during dissection.
2. Use of Protective Eyewear is recommended during handling and dissection of preserved specimens and preserving fluids. In many instances internal preserving fluid present in the specimen body cavity has the potential to emerge in a spurt with initial body cavity incision thus possibly striking the dissector in the eye. Contact lenses should never be worn when handling or using any preserving or holding fluid.
3. Reduction of "free formaldehyde" - Formaldehyde (formalin) acts in fixation by binding (cross linking) tissue protein. Excess formaldehyde that is not bound up in tissue is therefore free to escape into the atmosphere. This "free formaldehyde" is present both in the specimen (tissues and body cavity fluid), and the surrounding preserving fluid itself. It is this "free formaldehyde" vapor that you and your students may observe.  
To reduce, "free formaldehyde", it is recommended that prior to student examination specimens be thoroughly washed in running tap water prior to both external as well as internal examination. Our testing has shown that such action will reduce titratable formaldehyde by at least 60%.
4. Laboratory Areas should have a sufficient number of eye wash stations in close proximity to dissection activities.
5. Aprons or Laboratory Coats should be worn by dissectors.
6. Do not allow preserving fluid to come into continuous contact with skin. If preserving fluid is ingested, induce vomiting immediately by giving two glasses of water and sticking fingers down throat. Call physician or poison control center. Never give anything by mouth to an unconscious person.
7. Rooms where dissection is done should be well ventilated.

**FIRST AID PROCEDURES:** The following practices are recommended as minimal in case of the following exposures to any of our preserving fluids:

**Eye Contact:** Immediately flush eyes with running tap water, occasionally lifting the lower and upper eyelids. Contact lenses should not be worn while working with preserving fluids or during dissection. Get medical attention.

**Prolonged Skin Contact:** May cause irritant dermatitis or rash. Affected area should be washed with soap and water thoroughly for 3 to 5 minutes. Remove and wash clothing that may be contaminated. If irritation continues, consult physician.

**Ingestion<sup>\*</sup>:** If conscious, give large volumes of water only, get individual to vomit by sticking finger down throat. NEVER encourage an unconscious person to vomit. Get medical attention immediately.

\*Please consult specific MDSS for particulars

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine suitability of the information for their particular purposes.

DATE: 7/21/81

SIGNATURE: 