



**Part of Thermo Fisher Scientific  
Material Safety Data Sheet**

Creation Date 03-Jan-2013

Revision Date 03-Jan-2013

Revision Number 1

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** Fisher-Fresh Preserved Specimens

**Synonyms** Bio-Fresh Preserved Specimens  
**Recommended Use** Laboratory chemicals

**Company** Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number**  
CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

**2. HAZARDS IDENTIFICATION**

**WARNING!**

Contains formaldehyde which can cause cancer. Handle in accordance with good industrial hygiene and safety practice.

**Appearance** No information available **Physical State** Solid **odor** slight

**Target Organs** No information available.

**Potential Health Effects**

**Acute Effects**  
**Principle Routes of Exposure**

**Eyes** May cause irritation  
**Skin** May cause irritation of respiratory tract  
**Inhalation** May cause irritation of respiratory tract  
**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

**Chronic Effects** Contains formaldehyde which can cause cancer.

See Section 11 for additional Toxicological Information.

**Aggravated Medical Conditions** No information available.

Thermo Fisher Scientific - Fisher-Fresh Preserved Specimens

Revision Date 03-Jan-2013

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Haz/Non-haz	Component	CAS-No	Weight %
	Water	7732-18-5	>99.9
	Phenol	108-95-2	Trace
	Formaldehyde	50-00-0	Trace
	1,2-Propylene glycol	57-55-6	Trace

**4. FIRST AID MEASURES**

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Rinse with plenty of water. Get medical attention immediately if symptoms occur.

**Inhalation** Move to fresh air. Get medical attention immediately if symptoms occur.

**Ingestion** Do not induce vomiting. Obtain medical attention.

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Flash Point** Not applicable  
**Method** No information available.

**Autoignition Temperature** No information available.

**Explosion Limits** No information available.  
**Upper** No data available  
**Lower** No data available

**Suitable Extinguishing Media** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..

**Unsuitable Extinguishing Media** No information available.

**Hazardous Combustion Products** No information available.

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

**Specific Hazards Arising from the Chemical** Thermal decomposition can lead to release of irritating gases and vapors.

**Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**NFPA** Health 1 **Flammability** 0 **Instability** 0 **Physical hazards** N/A

RECEIVED

MAINTENANCE DEPT.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal Precautions** Use personal protective equipment. Ensure adequate ventilation.
- Environmental Precautions** Should not be released into the environment.
- Methods for Containment and Clean Up** Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE**

- Handling** Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. Do not ingest.
- Storage** Keep containers tightly closed in a cool, well-ventilated place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phenol	TWA: 5 ppm Skin	(Vacated) TWA: 19 mg/m <sup>3</sup> Skin TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>	IDLH: 250 ppm TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> Ceiling: 15.6 ppm Ceiling: 60 mg/m <sup>3</sup>
Formaldehyde	Ceiling: 0.3 ppm	(Vacated) TWA: 3 ppm (Vacated) STEL: 10 ppm (Vacated) Ceiling: 5 ppm TWA: 0.75 ppm STEL: 2 ppm	IDLH: 20 ppm TWA: 0.016 ppm Ceiling: 0.1 ppm
Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Phenol	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> Skin	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> STEL: 10 ppm STEL: 36 mg/m <sup>3</sup>	TWA: 5 ppm Skin
Formaldehyde	Ceiling: 2 ppm Ceiling: 3 mg/m <sup>3</sup>	Peak: 2 ppm Peak: 3 mg/m <sup>3</sup>	STEL: 1.0 ppm CEV: 1.5 ppm TWA: 50 ppm TWA: 185 mg/m <sup>3</sup>
1,2-Propylene glycol			

NIOSH IDLH: Immediately Dangerous to Life or Health

**Personal Protective Equipment**  
**Eye/Face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

**Skin and body protection**  
**Respiratory Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure  
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Physical State**
- Appearance**
- odor**
- Odor Threshold**
- pH**
- Vapor Pressure**
- Vapor Density**
- Viscosity**
- Boiling Point/Range**
- Melting Point/Range**
- Decomposition temperature**
- Flash Point**
- Evaporation Rate**
- Specific Gravity**

- Solid
- No information available
- slight
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.
- No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Solubility: No information available.  
log Pow: No data available

**10. STABILITY AND REACTIVITY**

**Stability**: Stable under normal conditions.  
**Conditions to Avoid**: Excess heat.  
**Incompatible Materials**: None known  
**Hazardous Decomposition Products**: Thermal decomposition can lead to release of irritating gases and vapors  
**Hazardous Polymerization**: Hazardous polymerization does not occur  
**Hazardous Reactions**: None under normal processing.

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity**: No acute toxicity information is available for this product  
**Product Information**: No acute toxicity information is available for this product

Component	LD50 Oral (Rat)	LD50 Dermal (Rat)	LC50 Inhalation (Dust)
Phenol	317 mg/kg (Rat)	525 mg/kg (Rat) 630 mg/kg (Rabbit)	316 mg/m <sup>3</sup> (Rat) 4 h
Formaldehyde	500 mg/kg (Rat)	Not listed	0.578 mg/L (Rat) 4 h
1,2-Propylene glycol	20000 mg/kg (Rat)	20000 mg/kg (Rabbit)	Not listed

**Irritation**: No information available.  
**Toxicologically Synergistic Products**: No information available.

**Chronic Toxicity**: The table below indicates whether each agency has listed any ingredient as a carcinogen.  
**Carcinogenicity**

Component	ACGIH	IARC	NTP	OSHA	Mexico
Phenol	Not listed	Group 3	Not listed	Not listed	Not listed
Formaldehyde	A2	Group 1	Reasonably Anticipated	X	A2

ACGIH: (American Conference of Governmental Industrial Hygienists)  
A1 - Known Human Carcinogen  
A2 - Suspected Human Carcinogen  
A3 - Animal Carcinogen  
ACGIH: (American Conference of Governmental Industrial Hygienists)

IARC: (International Agency for Research on Cancer)  
IARC: (International Agency for Research on Cancer)  
Group 1 - Carcinogenic to Humans  
Group 2A - Probably Carcinogenic to Humans  
Group 2B - Possibly Carcinogenic to Humans  
NTP: (National Toxicity Program)  
Known - Known Carcinogen  
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens  
A1 - Confirmed Human Carcinogen  
A2 - Suspected Human Carcinogen  
A3 - Confirmed Animal Carcinogen  
A4 - Not Classifiable as a Human Carcinogen  
A5 - Not Suspected as a Human Carcinogen

**Sensitization**: No information available.  
**Mutagenic Effects**: No information available.  
**Reproductive Effects**: No information available.  
**Developmental Effects**: No information available.  
**Teratogenicity**: No information available.  
**Other Adverse Effects**: See actual entry in RTECS for complete information.  
**Endocrine Disruptor Information**: No information available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Phenol	0.0188 - 0.1044 mg/L EC50 96 h 46.42 mg/L EC50 = 96 h 187 - 278 mg/L EC50 72 h	4-7 mg/L LC50 96 h 32 mg/L LC50 96 h	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	10.2 - 15.5 mg/L EC50 48 h 4.24 - 10.7 mg/L EC50 48 h
Formaldehyde	Not listed	Leuciscus idus: LC50 = 15 mg/L 96h	Not listed	EC50 = 20 mg/L 96h EC50 = 2 mg/L 48h
1,2-Propylene glycol	19000 mg/L EC50 = 96 h	710 mg/L LC50 96 h 41 - 47 mg/L LC50 96 h 51600 mg/L LC50 96 h 51400 mg/L LC50 96 h	= 710 mg/L EC50 Photobacterium phosphoreum 30 min	10000 mg/L EC50 > 48 h 10000 mg/L EC50 > 24 h

**Persistence and Degradability**: No information available  
**Bioaccumulation/ Accumulation**: No information available

**Mobility**

Component	log Pow
Phenol	1.47
Formaldehyde	-0.35
1,2-Propylene glycol	-0.9

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Phenol - 108-95-2	U188	
Formaldehyde - 50-00-0	U122	

**14. TRANSPORT INFORMATION**

- DOT** Not regulated
- TDG** Not regulated
- IATA** Not regulated
- IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Water	X	X	-	231-791-2	-	-	X	-	X	X	X
Phenol	X	X	-	203-632-7	-	-	X	X	X	X	X
Formaldehyde	X	X	-	200-001-8	-	-	X	X	X	X	X
1,2-Propylene glycol	X	X	-	200-338-0	-	-	X	X	X	X	X

**Legend:**  
 X - Listed  
 E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.  
 F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.  
 N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.  
 P - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.  
 R - Indicates a substance that is identified in a proposed or final Significant New Use Rule.  
 S - Indicates a substance that is the subject of a Section 4 test rule under TSCA.  
 T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.  
 XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

**Y1** - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.  
**Y2** - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Phenol	108-95-2	trace	1.0
Formaldehyde	50-00-0	trace	0.1

**SARA 311/312 Hazardous Categorization**

- Acute Health Hazard No
- Chronic Health Hazard No
- Fire Hazard No
- Sudden Release of Pressure Hazard No
- Reactive Hazard No

**Clean Water Act**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Water	-	1 LB	-	-
Phenol	X	1000 lb	X	X
Formaldehyde	X	100 lb	-	-

**Clean Air Act**

Component	HAPS Data	Class 1 Ozone Depleters	Class 2 Ozone Depleters
Phenol	X	-	-
Formaldehyde	X	-	-

**OSHA**

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Formaldehyde	2 ppm STEL 0.5 ppm Action Level 0.75 ppm TWA	TC: 1000 lb

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Phenol	1000 lb	1000 lb
Formaldehyde	100 lb	100 lb

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL

Formaldehyde	50-00-0	Carcinogen	40 µg/day
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**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Formaldehyde	X	X	X	X	X
1,2-Propanediol glycol	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): Y  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Formaldehyde	11250 lb STQ (solution)

**Other International Regulations**

Mexico - Grade No information available  
 Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class  
 Non-controlled

**16. OTHER INFORMATION**

Prepared By  
 Regulatory Affairs  
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Revision Summary \*\*\*\*, and red text indicates revision

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

