

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Paraplast, Extra  
**Use/Size** Tissue embedding medium / 8-10 bags per case (1kg/bag)  
**Product Numbers** 8889-503002  
**Manufacturer/Supplier** Tyco Healthcare/ Kendall  
**Address** 15 Hampshire Street  
 Mansfield, MA 02048  
**Phone Number** (508) 261-8000 (Monday – Friday 8:00 am to 5:00 pm)  
**Chemtrec Number** (800) 424-9300  
**Revision Date:** January 30, 2004  
**MSDS Date:** September 22, 1998

*This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)*

## 2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration	R Phrases	Classification
Polyisobutylene	9003-27-4 No EC #	< 5.00%	R-None	None
Paraffin	8002-74-2 232-315-6	> 85.00%	R-None	None
Microcrystalline Wax	63231-60-7 264-038-1	< 5.00%	R-None	None
Hydrocarbon Resin	64742-16-1 265-116-8	< 5.00%	R-None	None
Butylated hydroxytoluene	128-37-0 204-881-4	1.00%	R-None	None

## 3. HAZARD IDENTIFICATION

**EU Main Hazards**

Not classified as hazardous.

**Routes of Entry**

- Eye contact - Skin contact

**Carcinogenic Status**

Not considered carcinogenic by NTP, IARC, and OSHA.

**Target Organs**

- Eye - Skin

**Health Effects - Eyes**

Contact may cause slight transient irritation.

**Health Effects - Skin**

Material may cause irritation.

**Health Effects - Ingestion**

A large dose may have the following effects:

- nausea - vomiting - diarrhea - abdominal pain - intestinal obstruction - liver damage - brain damage

**Health Effects - Inhalation**

No adverse effects are expected during normal conditions of use. Inhalation of paraffin wax fumes during heating may irritate the eyes, nose and throat.

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## 4. FIRST AID MEASURES

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### **Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

### **Skin**

If skin irritation develops, or other symptoms occur, discontinue use. Seek medical attention if symptoms persist.

### **Ingestion**

Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Obtain medical attention immediately.

### **Inhalation**

If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.

### **Advice to Physicians**

Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

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### **Extinguishing Media**

Not Flammable. Select extinguishing agent appropriate to other materials involved.

### **Unusual Fire and Explosion Hazards**

This product may give rise to hazardous fumes in a fire.

### **Protective Equipment for Fire-Fighting**

Wear full protective clothing and self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

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This product may be collected by carefully scooping into a pan, paper towel or other absorbent material. If wax is hot, let cool before initiating clean up. To clean-up spills of cooled wax, use nonsparking tools to scrape the wax into suitable containers for disposal. Wear appropriate protective clothing.

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## 7. HANDLING AND STORAGE

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Keep container tightly closed when not in use. Storage area should be: - cool - dry - well ventilated  
- away from incompatible materials

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### **Occupational Exposure Standards**

Exposure limits are listed below, if they exist.

### **Polyisobutylene**

None assigned.

### **Paraffin**

(fume) ACGIH: TLV 2mg/m<sup>3</sup> 8h TWA.

UK EH40: OES 2mg/m<sup>3</sup> 8h TWA.

UK EH40: OES 6mg/m<sup>3</sup> 10min TWA.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Microcrystalline Wax**

None assigned.

**Hydrocarbon Resin**

None assigned.

**Butylated hydroxytoluene**

None assigned.

**Engineering Control Measures**

No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels. Heating of this product may generate vapors or fumes, therefore, local exhaust ventilation is recommended to keep airborne concentrations below exposure limits.

**Respiratory Protection**

Respiratory protection if there is risk of breathing mists or vapors from heated material. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

**Hand Protection**

Chemical resistant gloves

**Eye Protection**

Chemical goggles or safety glasses with side shields

**Body Protection**

Normal work wear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Solid Pellets
<b>Color</b>	Colorless - White - Translucent
<b>Odor</b>	Odorless
<b>pH</b>	No data.
<b>Boiling Range/Point (°C/F)</b>	No data.
<b>Melting Point (°C/F)</b>	47-65 / 117-149 (depending on grade)
<b>Flash Point (PMCC) (°C/F)</b>	204 / 400
<b>Auto-flammability (deg C)</b>	245 (for 100% paraffin)
<b>Explosion Limits (%)</b>	No data.
<b>Vapor Pressure</b>	No data.
<b>Density</b>	No data.
<b>Solubility in Water</b>	Insoluble
<b>Vapor Density (Air = 1)</b>	No data.
<b>Viscosity (cSt)</b>	No data.

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**10. STABILITY AND REACTIVITY**

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**Stability**

Stable under normal conditions.

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## 10. STABILITY AND REACTIVITY

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**Conditions to Avoid**

- Heat - High temperatures

**Materials to Avoid**

- Reducing agents - Strong acids

**Hazardous Polymerization**

Will not occur.

**Hazardous Decomposition Products**

- acrid smoke and irritating fumes - oxides of carbon

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## 11. TOXICOLOGICAL INFORMATION

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**Acute Toxicity**

Low order of acute toxicity predicted.

Paraffin: A 100 mg dose applied to the rabbit eye for 24 hours caused mild irritation. A 500 mg dose applied to the rabbit skin for 24 hours caused mild irritation.

Hydrocarbon Resin: Oral LD50 (mammal) 7000mg/kg.

Butylated Hydroxytoluene: Oral LD50 (rat) 890 mg/kg.

**Chronic Toxicity/Carcinogenicity**

Paraffin: When implanted in rats (120 mg/kg) and mice (480-660 mg/kg), caused tumors of the bladder, lungs and thorax.

Butylated Hydroxytoluene: IARC assessment: this product is not classifiable as to its carcinogenicity to humans (Group 3).

**Genotoxicity**

This product is not expected to cause any mutagenic effects.

**Reproductive/Developmental Toxicity**

This product is not expected to cause reproductive or developmental health effects.

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## 12. ECOLOGICAL INFORMATION

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**Mobility**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bio-accumulation**

No relevant studies identified.

**Ecotoxicity**

No relevant studies identified.

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## 13. DISPOSAL

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Dispose of in accordance with all applicable local and national regulations.

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## 14. TRANSPORT INFORMATION

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<b>DOT CFR 172.101 Data</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>UN Class</b>	None.
<b>UN Number</b>	None.
<b>UN Packaging Group</b>	None.
<b>Classification for AIR Transportation (IATA)</b>	Consult current IATA Regulations prior to shipping by air.

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## 15. REGULATORY INFORMATION

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### EU Label Information

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

### EU Hazard Symbol and Indication of Danger

According to EC Commission Directive 67/548/EEC this product is not classified.

### R phrases

None.

### S phrases

None.

### US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

#### TSCA Listing

All ingredients have been verified for inclusion on the EPA Toxic Substance Control Act Chemical Substance Inventory.

#### EINECS Listing

All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.

#### DSL (Canadian) Listing

All ingredients in this product are listed on the Domestic Substance List (DSL).

#### MA Right To Know Law

All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at or above the de minimus concentration include: - Paraffin - Butylated Hydroxytoluene

#### PA Right To Know Law

This product contains the following chemicals found on the Pennsylvania Hazardous Substance List: - Paraffin - Butylated Hydroxytoluene

#### NJ Right To Know Law

This product does not contain any chemicals on the New Jersey Workplace Hazardous Substance List. - Butylated Hydroxytoluene

#### California Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

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## 15. REGULATORY INFORMATION

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**SARA Title III Sect. 302 (EHS)**

This product does not contain any chemicals subject to SARA Title III Section 302.

**SARA Title III Sect. 304**

This product does not contain any chemicals subject to SARA Title III Section 304.

**SARA Title III Sect. 311/312 Categorization**

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

**SARA Title III Sect. 313**

This product does not contain a chemical that is listed in Section 313 at or above de minimis concentrations.

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## 16. OTHER INFORMATION

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**NFPA Ratings**

NFPA Code for Flammability - 1

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

**HMIS Ratings**

HMIS Code for Flammability - 1

HMIS Code for Health - 1

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

**Abbreviations**

N/A: Denotes no applicable information found or available

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

EU: European Union

R: Risk

S: Safety

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

BOD: Biological Oxygen Demand

KoC: Soil Organic Carbon Partition Coefficient

**Prepared By:** EnviroNet LLC.

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