SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name: Paraplast
Product Number: 39601006; 39602012; 39501006
SDS Date: August 25, 2015

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Tissue Embedding / Infiltration Medium
Uses Advised Against: All other uses.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer/Preparer: Leica Biosystems Richmond, Inc
5205 Route 12
Richmond, IL 60071
800-225-3035
LBSNA-LBS-QA@LEICABIOSYSTEMS.COM

1.4 Emergency Telephone Number

Emergency Spill: 1-800-424-9300 (ChemTrec)
+1 703-527-3887 International calls (call collect)
13 11 26 (Australia 24 Hr Poisons Information Centre)
Other Information: 1-800-225-3035

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008): None required.

2.2 Label Elements

Hazard Pictograms: None required.
Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.

2.3 Other Hazards

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Other hazards which do not result in classifications : None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number / EINECS Number / REACH Reg. Number</th>
<th>% (w/w)</th>
<th>CLP/GHS Classification (1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No ingredients are classified as hazardous

See Section 16 for full text of GHS and EU Classifications.

**SECTION 4: FIRST AID MEASURES**

4.1 Description of First Aid Measures

**Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.

**Skin contact:** In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly after handling. Get medical attention if symptoms occur.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

See Section 11 for more detailed information on health effects.

4.2 Most important symptoms and effects, both acute and delayed

**Eye contact:** May cause mild eye irritation.

**Skin contact:** Contact with molten product may cause thermal burns.

**Inhalation:** May cause respiratory tract irritation.

**Ingestion:** No known significant effects or critical hazards.

4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No immediate treatment is normally required.

**Specific treatments:** No specific treatment.

**SECTION 5: FIREFIGHTING MEASURES**

5.1 Extinguishing Media

**Suitable extinguishing media:** Use dry chemical, alcohol foam, carbon dioxide (CO₂), or water spray.

**Unsuitable extinguishing media:** Not classified as flammable, but product will burn under fire conditions.

5.2 Special hazards arising from the substance or mixture

**Unusual fire and explosion hazards:** None known.

**Combustion products:** Oxides of carbon; smoke; wax fumes.
5.3 Advice for fire-fighters

Special protective equipment for fire-fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.

Special protective action for fire-fighters: Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

For emergency responders: Wear appropriate protective equipment. Avoid contact with molten material.

6.2 Environmental precautions

Environmental precautions: Prevent entry in storm sewers and waterways. Report spill as required by local and federal regulations.

6.3 Methods and materials for containment and cleaning up

For small or large spill: At ambient temperatures, pick up material and place into a container for disposal. If molten, allow to solidify and cool. Pick up or scrape up and place into a container for disposal.

6.4 Reference to other sections

Refer to Section 8 for personal protective equipment, and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for safe handling

Protective measures: Avoid contact with molten material. Avoid breathing fumes from heated material. Use with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Protect containers from physical damage. Store in a cool area. Keep containers closed when not in use. Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all SDS precautions in handling empty containers.

7.3 Specific end use(s)

Industrial uses: None identified.
Professional uses: Tissue Embedding / Infiltration Medium

SECTION 8: EXPOSURE CONTROLS/PERSOAL PROTECTION

8.1 Control parameters

Occupational exposure limits:

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Chemical Name | US OEL | EU IOEL | UK OEL | Germany OEL |
--- | --- | --- | --- | --- |
Paraffin Wax (Fumes) | 2 mg/m³ TWA ACGIH TLV | None established | 2 mg/m³ TWA 6 mg/m³ STEL | None established |

Refer to local or national authority for exposure limits not listed above.

8.2 Exposure controls

**Recommended monitoring procedure**: Collection on filters with analysis by gas chromatography.

**Appropriate engineering controls**: Use with adequate local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

**Personal protective measures**

**Eye/face protection**: Wear safety glasses or chemical goggles.

**Skin protection**: Impervious clothing as needed to avoid skin contact.

**Hands**: Impervious gloves recommended (butyl rubber).

**Respiratory protection**: Use a properly fitted, particulate filter respirator complying with an approved standard is a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Other protection**: Suitable washing facilities should be available.

### SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>White solid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Paraffin</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>132°F (56°C)</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Lower flammability limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Upper flammability limit</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor density (air = 1)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Specific gravity (H₂O = 1)</strong></td>
<td>~0.8</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>~0.8</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Octanol/water partition coefficient</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not explosive</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Molecular formula</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Molecular weight</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

#### 9.2 Other information

No additional information available
SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity : This material is not reactive under normal conditions.
10.2 Chemical stability : Normally stable.
10.3 Possibility of hazardous reactions : Reaction with oxidizers may generate heat and cause fire.
10.4 Conditions to avoid : Extreme heat.
10.5 Incompatible materials : Oxidizing agents.
10.6 Hazardous decomposition products : Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon, smoke, wax fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Potential health effects:
Eye contact : Contact may cause slight, transient irritation. Wax fumes may cause eye irritation with redness and tearing. Contact with molten product may cause thermal burns.
Skin contact : Contact with molten product may cause thermal burns.
Inhalation : Inhalation of fumes may cause irritation of the eyes, nose, and upper respiratory tract. Symptoms include coughing, sneezing, and sore throat.
Ingestion : Small amounts are not anticipated to cause adverse effects. Large quantities may cause obstruction of the bowel.

Acute toxicity : No data available.
Skin corrosion/irritation : No data available.
Eye damage/irritation : No data available.
Respiratory irritation : No data available.
Respiratory sensitization : No data available.
Skin sensitization : No data available.
Germ cell mutagenicity : No data available.
Carcinogenicity : No data available.
Reproductive Toxicity : No data available.
Specific Target Organ Toxicity:
Single exposure : No data available.
Repeat exposure : No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not expected to be toxic</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability : No data available.
12.3 Bioaccumulative potential : No data available.
12.4 Mobility in soil : No data available.

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12.5 Results of PVT and vPvB assessment: No data available.

12.6 Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
<td>Not regulated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Canada TDG</td>
<td>Not regulated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EU ADR/RID</td>
<td>Not regulated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user: None.

14.7 Transport in bulk according to Annex III MARPOL 73/78 and the IBC Code: Not determined

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Regulations
TSCA Inventory: All of the components are listed on the TSCA Inventory.
SARA 302: This product does not contain chemicals regulated under SARA 302.
SARA 311 Hazard Classification: This product does not contain chemicals regulated under SARA 311.
SARA 313: This product does not contain chemicals regulated under SARA 313.
CERCLA Section 103: This product is not subject to CERCLA.
California Prop 65: This product contains the following chemical(s) which are known to the state of...
California to cause cancer, reproductive toxicity, or birth defects: None known.

### SECTION 16: OTHER INFORMATION

**Revision history**: Updated formatting

**CLP/GHS Classification and H Phrases for Reference (See Section 3)**

None

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Health: 1</th>
<th>Fire: 1</th>
<th>Instability: 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS Rating</td>
<td>Health: 1</td>
<td>Fire: 1</td>
<td>Physical Hazard: 0</td>
</tr>
</tbody>
</table>

**Notice to reader:**

This Safety Data Sheet (SDS) has been prepared in accordance with the Classification, Labelling, and Packaging (CLP) regulation in the EU and the Globally Harmonized System (GHS) (29CFR 1910.1200) in the US. It complies with the requirements of the Canadian Controlled Products Regulations. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.