Section 1. Chemical Product and Company Identification

- **Common Name/Trade Name**: Cremophor EL
- **Catalog Number(s)**: P2404, YY998
- **CAS#**: 61791-12-6
- **RTECS**: GO5661000
- **TSCA**: TSCA 8(b) inventory: Cremophor EL
- **CI#**: Not available.

**Manufacturer**: SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

**Commercial Name(s)**: Not available.

**Synonym**: PEG 40 Castor Oil; PEG-35 Castor Oil; Castor Oil polyoxyethylene ether; Polyoxyethyleneglycol Trifluoro; Castor Oil, ethoxylated; Castor oil, ethylene glycol polymer

**Chemical Name**: Ethoxylated Castor Oil

**Chemical Family**: Not available.

**Chemical Formula**: Not available.

**Supplier**: SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cremophor EL</td>
<td>61791-12-6</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Exposure Limits**

**Toxicological Data on Ingredients**: Not applicable.

Section 3. Hazards Identification

**Potential Acute Health Effects**: Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects**: CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.

Continued on Next Page
### Section 4. First Aid Measures

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye Contact</strong></td>
<td>Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.</td>
</tr>
<tr>
<td><strong>Skin Contact</strong></td>
<td>Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.</td>
</tr>
<tr>
<td><strong>Serious Skin Contact</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.</td>
</tr>
<tr>
<td><strong>Serious Inhalation</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.</td>
</tr>
<tr>
<td><strong>Serious Ingestion</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 5. Fire and Explosion Data

| **Flammability of the Product** | May be combustible at high temperature. |
| **Auto-Ignition Temperature** | 405°C (761°F) |
| **Flash Points** | CLOSED CUP: 257°C (494.6°F). |
| **Flammable Limits** | Not available. |
| **Products of Combustion** | Not available. |
| **Fire Hazards in Presence of Various Substances** | Slightly flammable to flammable in presence of open flames and sparks of heat. Non-flammable in presence of shocks. |
| **Fire Fighting Media and Instructions** | SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. |
| **Special Remarks on Fire Hazards** | Not available. |
| **Special Remarks on Explosion Hazards** | Not available. |

### Section 6. Accidental Release Measures

| **Small Spill** | Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. |
| **Large Spill** | Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. |

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Continued on Next Page
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe gas/fumes/vapor/ spray. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage
Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Personal Protection
Safety glasses. Lab coat. Gloves (impervious).
Respiratory protection is not necessary for normal handling. Adequate general (room) ventilation or local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Wear appropriate respirator when ventilation is inadequate.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid. (Oily liquid.)</td>
<td>Castor Oil odor (Slight.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Molecular Weight</th>
<th>Taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH (1% soln/water)</th>
<th>pH of 10% aqueous solution: 6 - 7</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Decomposition temperature: 300°C (572°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>4°C (39.2°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Temperature</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.05 - 1.06(Water = 1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Density</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volatility</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
</tbody>
</table>


| Ionicity (in Water)   | Not available. |

| Dispersion Properties | See solubility in water. |

| Solubility            | Miscible in cold water. Solubility (miscibility) in water: 100 g/l @ 20 deg. Soluble in many organic solvents. |

Continued on Next Page
Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, incompatible materials</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive with oxidizing agents, acids, alkalis.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Remarks on Reactivity</th>
<th>Normally unreactive. However, avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Absorbed through skin. Eye contact. Inhalation. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>Acute oral toxicity (LD50): &gt;6400 mg/kg [Rat]. Acute dermal toxicity (LD50): &gt;2500 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.</td>
</tr>
<tr>
<td>Special Remarks on Toxicity to Animals</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Chronic Effects on Humans</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Remarks on other Toxic Effects on Humans</th>
<th>Acute Potential Health Effects: Skin: Not usually a skin irritant. May cause mild skin irritation. Toxicity is unlikely following contact with intact skin. Eyes: It is considered non-irritating. However, overexposure to vapor generated at high temperatures may result in mild eye irritation. Inhalation: Overexposure to vapor generated at high temperatures may result in respiratory tract irritation, dizziness, nausea, vomiting. Ingestion: Toxicity is unlikely following ingestion of small amounts. Ingestion of large amounts may cause digestive tract irritation with nausea, vomiting, flatulence, and diarrhea. Ingestion of high doses may also affect the liver, kidneys, cardiovascular system (cardiac arrhythmias, hypotension), and respiratory system (pulmonary edema, aspiration pneumonitis with respiratory insufficiency). PEG may be a human allergen or hapten. Anaphylaxis may occur following ingestion of PEG. Toxicity is related to molecular weight of the polyethylene glycol. Liquid products (MW 200 to 400) have produced toxicity, while solid products (MW or greater) are mostly not absorbed. Chronic Potential Health Effects: Skin: Although this material is not a skin irritant, submersion by workers of unprotected skin in highly concentrated solutions of this material for prolonged periods of time could result in skin dehydration and irritation. Eyes: Prolonged or repeated eye contact may result in irritation. Prolonged or repeated ingestion may affect the liver, kidneys, and metabolism (weight loss, metabolic acidosis, hypocalcemia, hyperosmolality).</th>
</tr>
</thead>
</table>

Continued on Next Page
Section 12. Ecological Information

Ecotoxicity
Not available.

BOD5 and COD
Not available.

Products of Biodegradation
Posibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation
Not available.

Special Remarks on the Products of Biodegradation
Not available.

Section 13. Disposal Considerations

Waste Disposal
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification
Not a DOT controlled material (United States).

Identification
Not applicable.

Special Provisions for Transport
Not applicable.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
TSCA 8(b) inventory: Cremophor EL

California Proposition 65 Warnings
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 500-151-7).
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICS).
Australia: Listed on AICS.

Other Classifications
WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC): This product is not classified according to the EU regulations: Not applicable.

HMIS (U.S.A.)

Health Hazard: 1
Fire Hazard: 1
Reactivity: 0
Personal Protection: B

National Fire Protection Association (U.S.A.)

Health: 1
Reactivity: 0
Specific hazard: 1

Continued on Next Page
**Section 16. Other Information**

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>YY998</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 6/6/2008.

Verified by Sonia Owen.


CALL (310) 516-8000

**Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. The Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.