Section 1 • Product and Company Identification

Product Name: LPS® Electro 140°
Part Number(s): 00916, C00916
Chemical Name: Petroleum Hydrocarbons
Product Use: A high flash point, low-odor, contact cleaner used to clean precision parts.

Manufacturer Information: LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084
TEL: USA & Canada: 1 800 241-8334
Outside USA and Canada: +1 770 243-8800
FAX: USA & Canada: 1 800 543-1563
Outside USA and Canada: +1 770 243-8899
Emergency Telephone Number: Chemtrec: USA & Canada: 1 800 424-9300
Outside USA and Canada: +1 703 527-3887
Website: http://www.lpslabs.com

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview:
Aerosol: DANGER: Flammable. Contents under pressure. Harmful or fatal if swallowed.
Bulk: Not applicable
Primary route(s) of entry: Skin and eye contact. Inhalation.

Potential Acute Health Effects:

- Eyes: Irritating to eyes.
- Skin: Repeated exposure may cause skin dryness or cracking.
- Inhalation: Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or headache.
- Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No IARC: No OSHA: No ACGIH: No
Mutagenic Effects: None
Teratogenic Effects: None
Target Organs: None
Medical conditions aggravated by exposure:
Persons with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, chronic respiratory diseases, or impaired liver or kidney function should avoid exposure.

Signs and Symptoms
Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 • Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>70 - 80%</td>
</tr>
<tr>
<td>3-Methoxy-3-Methylbutan-1-ol</td>
<td>56539-66-3</td>
<td>20 - 30%</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
<td>1 - 5%</td>
</tr>
</tbody>
</table>

Section 4 • First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim’s head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.
Section 5 • Fire Fighting Measures

Products of Combustion: Carbon monoxide and carbon dioxide.

General Fire Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Firefighting media: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use CO2, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosions.

Special Remarks on Explosion Hazards: Aerosols may explode upon heating, spread fire and overcome sprinkler systems.

Section 6 • Accidental Release Measures

Containment Procedures: Small Spill and Leak: Eliminate ignition sources. Absorb with an inert material and dispose of properly. Large Spill and Leak: Eliminate ignition sources. Secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal.

Clean-Up Procedures: Recover free product and place in a suitable container for disposal.

Evacuation Procedures: Ventilate area of leak or spill. Keep unnecessary and unprotected people away.

Special Procedures: Remove all sources of ignition. Ventilate area. Wear personal protective equipment during cleanup.

Section 7 • Handling and Storage

Handling: DO NOT spray into or around ignition sources. DO NOT allow material to come in contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Avoid breathing vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store between 40°F and 120°F (4.4°C and 49°C).

Precautions to be taken in handling and storage: Store aerosols as Level 3 Aerosol (NFPA 30B). Store all materials in a dry, well-ventilated area. Avoid breathing vapors.
Section 8 • Exposure Controls / Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>5 mg/m3 (oil mist) PEL</td>
<td>5 mg/m3 (oil mist) TLV 10 mg/m3 (oil mist) STEL</td>
<td>5 mg/m3 (oil mist) TWA 10 mg/m3 (oil mist) STEL</td>
<td>171 ppm TWA</td>
</tr>
<tr>
<td>3-Methoxy-3-Methylbutan-1-ol</td>
<td>56539-66-3</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>None reported</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
<td>5000 ppm PEL</td>
<td>5000 ppm TLV 30000 ppm STEL</td>
<td>5000 ppm TWA 30000 ppm STEL</td>
<td>None reported</td>
</tr>
</tbody>
</table>

Engineering Controls: Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above.

Personal protective equipment

Eye protection: Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

Hand protection: Normally no hand protection is required; however, if product will be sprayed for an extended period, "overspray" onto skin may occur. If so, wear chemical resistant gloves conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.

Respiratory protection: Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.
Section 9 • Physical and Chemical Properties

**Appearance:** Liquid  
**Color:** Clear, colorless

**Odor:** Mild, ether-like  
**Evaporation Rate:** < 0.1 (BuAc = 1)

**Solubility Description:** 25% in water  
**Flash Point:** > 60°C (140°F) - dispensed liquid

**Boiling Point:** 174°C (345°F)  
**Flash Point Method:** Tag-Closed Cup

**Specific Gravity (H2O=1):** 0.78 - 0.81 @ 20°C  
**Decomposition Temperature:** Not established

**Vapor Density (air = 1):** 5.1  
**Auto ignition temperature:** > 260°C (500°F)

**Vapor Pressure:** 0.49 mm Hg @ 20°C  
**Flammable limits (estimated):**  
LOWER: 1.2%  
UPPER: 13.1%

**Rule 1171 PPC:** Not established  
**Partition Coefficient (octanol/water):** < 1

**V.O.C. Content:**  
Aerosol: 96.8% per State & Federal Consumer Product Regulations; 775 g/L per SCAQMD Rule 102  
**Odor Threshold:** Not established

**Melting Point:** Not established  
**Viscosity:** Not established

**pH:** Not applicable  
**Volatiles:** 100%

**Heat of combustion:** > 30 kJ/g

Section 10 • Stability and Reactivity

**Chemical Stability:** Product is stable under recommended storage conditions.

**Conditions to Avoid:** Keep away from heat and ignition sources. Avoid exposure to direct sunlight for extended periods and temperature in excess of 122°F (50°C).

**Incompatibility:** Extremely reactive or incompatible with oxidizing agents.

**Hazardous Decomposition:** Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.
Section 11 • Toxicological Information

A: General Product Information
An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>LC-50</th>
<th>LD-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>Not established</td>
<td>&gt; 10000 mg/kg / oral*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 3160 mg/kg / dermal*</td>
</tr>
<tr>
<td>3-Methoxy-3-Methylbutan-1-ol</td>
<td>56539-66-3</td>
<td>Not established</td>
<td>4.3 g/kg / oral / rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 2000 mg/kg / dermal / rat</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
<td>470000 ppm / rat / 30 minutes</td>
<td>Not appropriate</td>
</tr>
</tbody>
</table>

* Supplier Data

Section 12 • Ecological Information

Mobility: Not established
Persistence / Degradability: Only slightly biodegradable
Bioaccumulative potential: Not established
Other adverse effects: None known

Ecological studies have not been conducted for this product. The following information is available for component(s) of this product.

Ecotoxicity

<table>
<thead>
<tr>
<th>Effects on Organisms</th>
<th>Component</th>
<th>CASRN</th>
<th>Test</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity on Fishes</td>
<td>3-Methoxy-3-Methylbutan-1-ol</td>
<td>56539-66-3</td>
<td>48-hr LC50</td>
<td>Oryzias Latipes</td>
<td>7,400 ppm*</td>
</tr>
<tr>
<td>Acute Toxicity on Daphnia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacterial Inhibition</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Growth inhibition of algae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioaccumulation in fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Supplier Data

For the 64742-48-9 component, no toxicity has been observed in water due to extremely low water solubility. If material is spilled on soil, some potential toxic effects could occur before biodegradation could remove material.
Section 13 • Disposal Considerations

Waste Status: Aerosol cans, if depressurized and emptied to less than 1 inch (2.54 cm) of fluid contents, are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). If disposed of in its received form, the aerosol product carries the waste code D003 (U.S.).

Disposal: Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

D.O.T. Ground

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>Consumer Commodity</th>
<th>UN No.:</th>
<th>NA</th>
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<tbody>
<tr>
<td>Hazard Class:</td>
<td>ORM-D</td>
<td>Technical Name:</td>
<td>NA</td>
</tr>
<tr>
<td>Subclass:</td>
<td>NA</td>
<td>Hazard Label:</td>
<td>ORM-D Already on box</td>
</tr>
<tr>
<td>Packing Group:</td>
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Road/Rail - ADR/RID

<table>
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<tr>
<th>UN No.:</th>
<th>1950</th>
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<tbody>
<tr>
<td>Packing Group:</td>
<td>NA</td>
<td>Classification Code:</td>
<td>SF</td>
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<tr>
<td>Name and description:</td>
<td>AEROSOLS, flammable</td>
<td>Hazard ID No.:</td>
<td>NA</td>
</tr>
<tr>
<td>Labeling:</td>
<td>2.1</td>
<td>Technical Name:</td>
<td>NA</td>
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</table>

IMDG-IMO

<table>
<thead>
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<tbody>
<tr>
<td>Shipping Name:</td>
<td>Aerosols</td>
<td>Subsidiary Risk:</td>
<td>2.1</td>
</tr>
<tr>
<td>Labeling:</td>
<td>2</td>
<td>Packing Group:</td>
<td>NA</td>
</tr>
<tr>
<td>Packing Instructions:</td>
<td>P003, LP02</td>
<td>EmS:</td>
<td>F-D, S-U</td>
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<tr>
<td>Marine pollutant:</td>
<td>No</td>
<td>Technical Name:</td>
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</table>

IATA - ICAO:

<table>
<thead>
<tr>
<th>UN No.:</th>
<th>1950</th>
<th>Class:</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>Aerosols, flammable</td>
<td>Subclass:</td>
<td>NA</td>
</tr>
<tr>
<td>Packing Instructions:</td>
<td>203, Y203 (Ltd. Qty.)</td>
<td>Packing Group:</td>
<td>NA</td>
</tr>
<tr>
<td>Labeling:</td>
<td>Flammable Gas</td>
<td>Technical Name:</td>
<td>NA</td>
</tr>
</tbody>
</table>

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.

Section 15 • Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: D003

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):
None

Toxic Substances Control Act (TSCA):
All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:
Sudden Release of Pressure, Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):
No individual section 313 component is present at or above 1%.

Section 112 Hazardous Air Pollutants (HAPs):
None
MATERIAL SAFETY DATA SHEET
LPS® Electro 140º

Revision Date: January 6, 2012  Supersedes: March 7, 2011

State Regulations

California: This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

California and OTC States: Not for sale in any jurisdiction adopting CARB or OTC Model rules for consumer products.

New Jersey Right to Know:
Aerosol: Naphtha (Petroleum), Hydrotreated Heavy 64742-48-9 ● 3-Methoxy-3-Methylbutan-1-ol 56539-66-3 ● Carbon dioxide 124-38-9
Bulk: Non applicable

International Regulations

Canadian Environmental Protection Act (CEPA):
All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS Classification:**
Aerosol: Class A, Class B5, Class D2B

Other Regulations:

Montreal Protocol listed ingredients: None
Stockholm Convention listed ingredients: None
Rotterdam Convention listed ingredients: None
RoHS Compliant: Yes

Section 16 • Other Information

<table>
<thead>
<tr>
<th>MSDS#: 10916</th>
<th>HMIS 1996</th>
<th>HMIS III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>Health: [1] 1</td>
<td></td>
</tr>
<tr>
<td>Flammability: 2</td>
<td>Flammability Aerosol: 4 Flammability Bulk: NA</td>
<td></td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>Physical Hazard Aerosol: 2 Physical Hazard Bulk: NA</td>
<td></td>
</tr>
</tbody>
</table>

NFPA
Flammability
Health
Reactivity
Special

Notice to Reader:
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.

Elena Badiuzzi, Compliance Manager
LPS Laboratories, a division of Illinois Tool Works