SECTION 1 • PRODUCT AND COMPANY IDENTIFICATION

Product Name: LPS® Precision Clean (Aerosol)
Part Number(s): 02720, C02720
Chemical Name: Alkaline, aqueous solution
Product Use: An industrial cleaner designed to remove grime, oils and light grease from metal, concrete and other durable surfaces.

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.

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: Inhalation of large quantities of spray mist may cause irritation of the respiratory tract.
- Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation.

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 skin disorders and/or chronic respiratory diseases 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 mist concentrations may cause irritation of throat and eyes.

### Section 3 • Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquified Petroleum Gas</td>
<td>68476-86-8</td>
<td>4 - 6%</td>
</tr>
<tr>
<td>(2-Methoxymethylethoxy) Propanol</td>
<td>34590-94-8</td>
<td>1 - 2%</td>
</tr>
<tr>
<td>Disodium Metasilicate</td>
<td>6834-92-0</td>
<td>0.1 - 1.0%</td>
</tr>
</tbody>
</table>

### Section 4 • First Aid Measures

**Eyes:** Check for and remove contact lenses. Immediately, 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 or if chemical burns are present.

**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. If conscious, give 2 to 3 glasses of water. 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.

**Sensitivity to Impact:** None

**Sensitivity to Static Discharge:** Yes

**Protection Clothing (Fire):** None

**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:** Ventilate area. Block the path of any flowing material using soil, gravel, or other readily available material. Absorb with dry earth, sand or other non-combustible material and dispose of properly.

**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:** Wear appropriate protective equipment during cleanup.

Section 7 • Handling and Storage

**Handling:** DO NOT spray into or around ignition sources. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing vapors or spray mists.

**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).

**Large Spill and Leak:** Ventilate area. Block the path of any flowing material using soil, gravel, or other readily available material. Absorb with dry earth, sand or other non-combustible material and dispose of properly.

**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.

**Precautions to be taken in handling and storage:**
- Store aerosols as Level 1 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>Liquified Petroleum Gas</td>
<td>68476-86-8</td>
<td>1000 ppm PEL</td>
<td>1000 ppm TLV</td>
<td>1000 ppm TWA</td>
<td>None reported</td>
</tr>
<tr>
<td>(2-Methoxymethylethoxy) Propanol</td>
<td>34590-94-8</td>
<td>100 ppm PEL</td>
<td>100 ppm TLV</td>
<td>100 ppm TWA</td>
<td>None reported</td>
</tr>
<tr>
<td>Disodium Metasilicate</td>
<td>6834-92-0</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</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
Odor: Citrus
Solubility Description: 100% in water
Boiling Point: 100°C (212°F)
Specific Gravity (H2O=1): 1.00 - 1.03 @ 20°C
Vapor Density (air = 1): > 1
Vapor Pressure: ~ 24 mm Hg @ 20°C
Flash Point: None - dispensed liquid
Flash Point Method: Tag-Closed Cup
Decomposition Temperature: Not established
Auto ignition temperature: Not established
Flammable limits (estimated): LOWER: N.E.  UPPER: N.E.
Rule 1171 PPc: Not established
Partition Coefficient (octanol/water): > 1
V.O.C. Content: 6.5% per State & Federal Consumer Product Regulations; 66 g/L per SCAQMD Rule 102
Odor Threshold: Not established
Melting Point: Not established
pH: 12.5
Heat of combustion: Aerosol: < 20 kJ/g
Bulk: Not applicable

Section 10 • Stability and Reactivity

Chemical Stability: Product is stable under recommended storage conditions.
Conditions to Avoid: Avoid extreme heating or freezing and substances that react with water.
Incompatibility: Reactive or incompatible with oxidizing agents.
Hazardous Decomposition: These products are carbon oxides (CO, CO2).
Hazardous Polymerization: Will not occur.

Section 11 • Toxicological Information

Acute and Chronic Toxicity

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>Liquified Petroleum Gas</td>
<td>68476-86-8</td>
<td>658 mg/L / rat / 4 hr*</td>
<td>Not appropriate</td>
</tr>
<tr>
<td>(2-Methoxymethylethoxy) Propanol</td>
<td>34590-94-8</td>
<td>Not established</td>
<td>5400 µL/kg / oral / rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 mL/kg / dermal / rabbit</td>
</tr>
<tr>
<td>Disodium Metasilicate</td>
<td>6834-92-0</td>
<td>Not established</td>
<td>1153 mg/kg / oral / rat</td>
</tr>
</tbody>
</table>

* Supplier Data
MATERIAL SAFETY DATA SHEET
LPS® Precision Clean (Aerosol)

Revision Date: January 26, 2012 Supersedes: March 13, 2009

Section 12 • Ecological Information

Mobility: May absorb to sediments.  
Persistence / Degradability: Biodegradable

Bioaccumulative potential: No bioaccumulation potential  
Other adverse effects: Not established

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>(2-Methoxymethylethoxy) Propanol</td>
<td>34590-94-8</td>
<td>96-hr EC50</td>
<td>Pimephales Promelas</td>
<td>&gt; 10000 mg/L</td>
</tr>
<tr>
<td></td>
<td>Disodium Metasilicate</td>
<td>6834-92-0</td>
<td>96-hr EC50</td>
<td>Brachydanio Rerio</td>
<td>3,185 mg of 35% solution per liter</td>
</tr>
<tr>
<td>Acute Toxicity on Daphnia</td>
<td>(2-Methoxymethylethoxy) Propanol</td>
<td>34590-94-8</td>
<td>48-hr EC50</td>
<td>Daphnia Magna</td>
<td>1,919 mg/L</td>
</tr>
<tr>
<td></td>
<td>Disodium Metasilicate</td>
<td>6834-92-0</td>
<td>96-hr EC50</td>
<td>Daphnia Magna</td>
<td>4,857 mg of 35% solution per liter</td>
</tr>
<tr>
<td>Bacterial Inhibition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth inhibition of algae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Bioaccumulation in fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Supplier Data

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 codes D002 and 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

<table>
<thead>
<tr>
<th>D.O.T. Ground</th>
<th>Shipping Name: Consumer Commodity</th>
<th>UN No.:</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>ORM-D</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Subclass:</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Road/Rail - ADR/RID

| UN No.:       | 1950                             | ADR Class: | 2  |
| Packing Group:| NA                               | Classification Code: | SF  |
| Name and description: | AEROSOLS, flammable | Hazard ID No.: | NA |
| Labeling:     | 2.1                              | Technical Name: | NA |

IMDG-IMO

| UN No.:       | 1950                             | Class:     | 2  |
| Shipping Name:| Aerosols                        | Subsidiary Risk: | 2.1 |
| Labeling:     | NA                              | Packing Group: | NA |
| Packing Instructions: | P003, LP02 | EmS: | F-D, S-U |
| Marine pollutant: | No | Technical Name: | NA |

IATA - ICAO:

| UN No.:       | 1950                             | Class:     | 2.1 |
| Shipping Name:| Aerosols, flammable             | Subclass:  | NA |
| Packing Instructions: | 203, Y203 (Ltd. Qty.) | Packing Group: | NA |
| Labeling:     | Flammable Gas                    | Technical Name: | NA |

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.
U.S. Federal Regulations

RCRA Hazardous Waste No.: D002, 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, Immediate (Acute) 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

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:
This product conforms to consumer product regulations.

New Jersey Right to Know:

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 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#:</th>
<th>12720</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Name:</td>
<td><strong>Elena Badiuzzi</strong> Compliance Manager</td>
</tr>
<tr>
<td>Telephone:</td>
<td>+1 770 243-8800</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS 1996</th>
<th>HMIS III</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>Health:</td>
<td>Flammability</td>
</tr>
<tr>
<td>Flammability: 3</td>
<td>Flammability Aerosol: 2</td>
<td>Flammability Bulk: NA</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>Physical Hazard Aerosol: 2</td>
<td>Physical Hazard Bulk: NA</td>
</tr>
</tbody>
</table>

**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