1. Product and Company Identification

Product identifier: LPS 3® (Bulk)
Version #: 04
Issue date: 06-03-2013
Revision date: 08-04-2014
Supersedes date: 08-12-2013
CAS #: Mixture
Part Number: C00322, C03128, C00305, C00355
Product use: A specialized soft-film coating designed to prevent rust and corrosion on steel, aluminum and other metals.

Manufacturer information: LPS Laboratories, a division of Illinois Tool Works
4647 Hugh Howell Rd
Tucker, Georgia 30084
United States
www.lpslabs.com
1-800-241-8334/ 770-243-8800
Chemtrec 1-800-424-9300

Supplier: Not available.

2. Hazards Identification

Emergency overview

DANGER
Combustible liquid. Will be easily ignited by heat, spark or flames.
HARMFUL OR FATAL IF SWALLOWED.
Irritating to eyes and skin. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure
Inhalation. Ingestion. Skin contact. Eye contact.

Eyes
Avoid contact with eyes. Causes eye irritation.

Skin
Avoid contact with the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Inhalation
Avoid breathing dust/fume/gas/mist/vapors/spray. May cause irritation of respiratory tract. Prolonged inhalation may be harmful. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma and death.

Ingestion
Do not ingest. Harmful: may cause lung damage if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Target organs
Central nervous system. Eyes. Respiratory system. Skin.

Signs and symptoms
Skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Irritation of eyes and mucous membranes. Conjunctivitis. Narcosis. Decrease in motor functions. Behavioral changes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects
Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Mineral Spirits</td>
<td>64742-88-7</td>
<td>60 - 70</td>
</tr>
<tr>
<td>1-butoxy-2-propanol</td>
<td>5131-66-8</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates Petroleum Hydrotreated Heavy</td>
<td>64742-54-7</td>
<td>1 - 10</td>
</tr>
</tbody>
</table>
4. First Aid Measures

First aid procedures

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

Skin contact
Take off immediately all contaminated clothing. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops and persists.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician if symptoms develop or persist.

Ingestion
Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to physician
Symptoms may be delayed.

General advice
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties
Combustible by WHMIS criteria. Heat may cause the containers to explode.

Extinguishing media
Suitable extinguishing media
Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters
Specific hazards arising from the chemical
Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment for firefighters
Firefighters should wear full protective clothing including self contained breathing apparatus. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. In the event of fire, cool tanks with water spray. Move containers from fire area if you can do so without risk. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Explosion data

Sensitivity to static discharge
Yes

Sensitivity to mechanical impact
None known.

Hazardous combustion products
May include oxides of carbon.

General fire hazards
Combustible liquid.

6. Accidental Release Measures

Personal precautions
Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up

Extinguish all flames in the vicinity. Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Keep away from sources of ignition - No smoking. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Avoid prolonged exposure. Do not use in areas without adequate ventilation. Wear personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment.

Storage

Do not handle or store near an open flame, heat or other sources of ignition. Keep container tightly closed. Store in a well-ventilated place. Store locked up. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates Petroleum, Hydrocracked Light (CAS 64742-47-8)</td>
<td>TWA</td>
<td>200 mg/m3</td>
<td>Non-aerosol</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Canada - British Columbia OELs: Skin designation

Distillates Petroleum, Hydrocracked Light (CAS 64742-47-8) Can be absorbed through the skin.

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.

Skin protection

Avoid contact with clothing. Wear suitable protective clothing. Chemical resistant gloves.

Respiratory protection

No personal respiratory protective equipment normally required. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

9. Physical & Chemical Properties

Appearance

Liquid.

Physical state

Liquid.

Form

Liquid.

Color

Brown.

Odor

Mild. Cherry.

Odor threshold

Not Established

pH

Not Applicable

Vapor pressure

2.6 mm Hg @ 20°C

Vapor density

4.8 (air = 1)

Boiling point

320 - 392 °F (160 - 200 °C)

Melting point/Freezing point

Not Established

Solubility (water)

Insoluble
Specific gravity: 0.81 @ 20°C
Relative density: Not available.
Flash point: 104.5 °F (40.3 °C) Tag Closed Cup
Flammability limits in air, upper, % by volume: 6 %
Flammability limits in air, lower, % by volume: 0.6 %
Auto-ignition temperature: 446 °F (230 °C) (concentrate)
VOC: 75.58 % per U.S. State and Federal Consumer Product Regulations
Evaporation rate: 0.2 (butyl acetate = 1)
Viscosity: 200 - 800 cP @ 25°C
Percent volatile: 78.45 %
Partition coefficient (n-octanol/water): Not Established
Other data:
Decomposition temperature: Not Established
Density: 6.82
Flammability (solid, gas): Not available.

10. Chemical Stability & Reactivity Information
Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability: Material is stable under normal conditions. Instability caused by elevated temperatures. Risk of ignition.
Conditions to avoid: Avoid temperatures exceeding the flash point. This product may react with oxidizing agents.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Carbon oxides.
Possibility of hazardous reactions: Hazardous polymerization does not occur.

11. Toxicological Information
Toxicological data:

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-butoxy-2-propanol (CAS 5131-66-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>1400 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.59 ml/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 651 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 5.83 mg/l</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.83 ml/kg</td>
</tr>
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<td>Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 2.5 mg/l</td>
</tr>
</tbody>
</table>
## Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50 Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

### LD50 Rat

**Oral Acute**

LD50 > 2000 mg/kg

**Dermal Acute**

LD50 > 2000 mg/kg

**Inhalation Acute**

LC50 Cat > 6.4 mg/l

Rat > 0.1 mg/l

### LD50 Rabbit

**Oral Acute**

LD50 > 2000 mg/kg

**Dermal Acute**

LD50 > 2000 mg/kg

### LC50 Cat

**Inhalation Acute**

Rat > 0.1 mg/l

### LD50 Rat

**Oral Acute**

LD50 > 5000 mg/kg

**Dermal Acute**

LD50 > 2000 mg/kg

### Light Mineral Spirits (CAS 64742-88-7)

**Acute**

LD50 Rat > 0.1 mg/l

**Dermal Acute**

LD50 Rabbit > 2000 mg/kg

**Inhalation Acute**

LC50 Cat > 6.4 mg/l

Rat > 0.1 mg/l

### LD50 Rabbit

**Oral Acute**

LD50 > 5000 mg/kg

### Acute effects

May be fatal if swallowed and enters airways.

### Sensitization

Not expected to be hazardous by WHMIS criteria.

### Local effects

Irritating to eyes and skin. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Chronic effects

Prolonged inhalation may be harmful.

### Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/irritation

Causes serious eye irritation.

### Mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Reproductive effects

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

### Teratogenicity

Not expected to be hazardous by WHMIS criteria.

### Symptoms and target organs

Irritating to eyes, respiratory system and skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Synergistic materials

No data available for this product.

## 12. Ecological Information

### Ecotoxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)</td>
<td>Aquatic Fish LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

### Ecotoxicity

Harmful to aquatic life with long lasting effects.

### Environmental effects

Harmful to aquatic organisms.

### Aquatic toxicity

May cause long-term adverse effects in the aquatic environment.

### Persistence and degradability

Not inherently biodegradable.

### Mobility in environmental media

The product is immiscible with water and will spread on the water surface.
Other adverse effects

None known.

13. Disposal Considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Waste from residues / unused products
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport Information

TDG

UN number
UN1268

UN proper shipping name
PETROLEUM DISTILLATES, N.O.S.; or PETROLEUM PRODUCTS, N.O.S.

Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards Not available.

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number
UN1268

UN proper shipping name
Petroleum distillates, n.o.s. mixture

Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 3L

Special precautions for user
Read safety instructions, MSDS and emergency procedures before handling.

Other information
Passenger and cargo aircraft
Allowed.
Cargo aircraft only
Allowed.

IMDG

UN number
UN1268

UN proper shipping name
PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. MIXTURE

Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant No.
EmS F-E, S-E

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, MSDS and emergency procedures before handling.

IATA; IMDG; TDG

Material name: LPS 3® (Bulk)
15. Regulatory Information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status
Controlled

WHMIS classification
B3 - Combustible Liquids
D2B - Other Toxic Effects-TOXIC

WHMIS labeling

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by
Not available.

This data sheet contains changes from the previous version in section(s):
- Composition / Information on Ingredients: Disclosure Overrides
- Fire Fighting Measures: Hazardous combustion products
- Physical & Chemical Properties: Multiple Properties
- Toxicological Information: Reproductivity
- Toxicological Information: Synergistic materials
- Toxicological Information: Teratogenicity
- Transport Information: Proper Shipping Name/Packing Group
- HazReg Data: North America
- GHS: Classification