

Revision Date: 28 January 2011 Supercedes: 15 October 2010

### Section 1 – Identity of the Substance/Preparation and Company/Undertaking

Product Name: LPS 3 (AEROSOL SPRAY CAN)

Part Numbers: M00316/M03400

**Product Use:** A penetrating soft film corrosion preventive compound that can be easily

removed.

Supplier: Geocel Limited, Western Wood Way, Langage Science Park, Plympton,

Plymouth, PL7 5BG United Kingdom

TEL: +44 (0)1752 202060

**FAX:** +44 (0)1752 334384

In Case of Emergency: +001 703-527-3887

Manufacturer: LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)

http://www.lpslabs.com

#### Section 2 – Hazards Identification

Human and Environmental Hazards This preparation is considered hazardous according to European Union Directives 67/548/EEC and 1999/45/EC. This product will combust when subjected to ignition sources. Do not spray on a naked flame or any incandescent material.

Extremely Flammable. Irritating to Eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Remark: The classification for aspiration hazards (R65), does not apply for products placed on the market in aerosol containers. (EU-Directive 67/548 Annex VI 9.4). Inhalation of concentrated petroleum distillate mist or vapours can cause central nervous system (CNS) depression.

#### Section 3 - Composition / Information on Ingredients

INGREDIENT NAME	EC No.	CASRN	Classification	Weight Percent
Distillates (Petroleum), Hydrotreated Light	265-149-8	64742-47-8	EU-Directive 67/548, Annex VI 9.4	45 - 55 %
Distillates (Petroleum), Hydrotreated Heavy paraffinic	265-157-1	64742-54-7	Note L	5 - 10%
Acetone	200-662-2	67-64-1	[F] R11; [Xi] R36, R66,R67	1 - 5%
Propylene Glycol Mono-n-butyl Ether	225-878-4	5131-66-8	[X <sub>i</sub> ] R36/38	1 - 5%
Light Mineral Spirits /Stoddard Solvent or Solvent Naphtha (petroleum), medium aliphatic	232-489-3 or 265-191-7	8052-41-3 or 64742-88-7	Note P or EU-Directive 67/548, Annex VI 9.4	1 - 2%
Carbon Dioxide	204-696-9	124-38-9	Not Classified	1 - 5%

Note L: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note L in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 3% DMSO)

Note P: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note P in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 0.1% benzene) See "Section 11: Toxicological Information" for information regarding the classification of substances. The classification for aspiration hazards (R65), does not apply for products placed on the market in aerosol containers. (EU-Directive 67/548 Annex VI 9.4)



Revision Date: 28 January 2011 Supercedes: 15 October 2010

#### Section 4 - First Aid Measures

Eyes: Liquid contact may cause irritation. Flush eyes with running water for at least 15 minutes, keeping

eyelids open. Get medical attention if irritation persists.

**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: If inhaled, remove to fresh air. If breathing is difficult, give oxygen and get medical attention. If not

breathing, give artificial respiration and get medical attention.

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 vapour that could cause explosive rupture of closed containers. Aerosols may explode upon heating, spread fire, and overcome sprinkler systems.

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, autoignition or explosions.

Sensitivity to Impact: None. Sensitivity to Static Discharge: Yes.

**Protection Clothing (Fire):** Wear protective clothing and equipment suitable for the surrounding fire, including helmet, face mask, and self-contained breathing apparatus.

#### Section 6 - Accidental Release Measures

Precautions to protect environment:

Do not allow entry into drains or watercourses. If this occurs inform the local authorities at once.

Spill Cleanup methods:

This product is a hermetically sealed pressurized aerosol unit and accidental spillage is unlikely. If can is ruptured, allow contents to discharge in situ, whilst removing all ignition sources from the area and ensuring maximum ventilation. Use an absorbent material, e.g. sand, to mop up residues. See section 13 'Disposal Considerations'.

### Section 7 – Handling and Storage

**Usage Precautions:** Do not spray on a naked flame or any incandescent material.

Storage Precautions: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

It is recommended that aerosols are stored in their own location away from bulk flammable liquids

and packaging materials. Store in a cool, dry place away from heat and ignition sources.



Revision Date: 28 January 2011 Supercedes: 15 October 2010

#### **Section 8 – Exposure Controls / Personal Protection**

Component	EC No.	UK LT EXP (8 hrs.)	UK ST EXP (15 min.)	Other
Distillates (Petroleum), Hydrotreated Light	265-149-8	Not Established	Not Established	100 ppm ACGIH-TLV
Distillates (Petroleum), Hydrotreated Heavy paraffinic	265-157-1	Not Established	Not Established	Not Established
Acetone	200-662-2	750 ppm	1500 ppm	500 ppm ACGIH-TLV 750 ppm ACGIH-STEL
Propylene Glycol Mono-n-butyl Ether	225-878-4	Not Established	Not Established	50 ppm TWA-PEL Supplier
Light Mineral Spirits /Stoddard Solvent or Solvent Naphtha (petroleum), medium aliphatic	232-489-3 or 265-191-7	Not Established	Not Established	500 ppm OSHA TWA-PEL 100 ppm ACGIH-TLV
Carbon Dioxide	204-696-9	5000 ppm	15000 ppm	5000 ppm ACGIH-TLV 30000 ACGIH-STEL

Engineering measures

Normal room ventilation is usually adequate. If necessary, use appropriate local exhaust

ventilation to keep exposures below the regulated limits.

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** Use protective gloves conforming to appropriate regulations. Please observe the instructions

regarding permeability and breakthrough time that are provided by the supplier of the gloves. Take into consideration the specific local conditions under which the product is used, such as

the danger of cuts, abrasion and the contact time.

**Respiratory protection** Typical use of this product under normal conditions does not require the use of respiratory

protection. If extended spraying of product will be made under poor ventilation, use appropriate

organic vapour filtering respirators

**Hygiene measures**Do not soak clothing with this product and continue working without immediately changing

clothes and washing skin. Do not reuse clothing until it has been laundered. An eyewash

fountain should be available in the work area.

Environmental exposure controls

Soak up puddles of product with absorbent material and dispose of according to local

regulations. Ventilate area to reduce worker exposure to vapours and prevent accumulation of

explosive vapour concentrations.



Revision Date: 28 January 2011 Supercedes: 15 October 2010

### **Section 9 – Physical and Chemical Properties**

Appearance: Liquid Colour: Hazy brown

Odour: Mild Cherry Evaporation Rate: 151 (Ethyl Ether=1)

Solubility Description: 5% in water Flash Point: 23°C(73°F) dispensed liquid

Boiling Point: 153°C (307°F) at 101 kPa Flash Point Method: Tag-Closed Cup

Specific Gravity 0.84 – 0.87 @ 20 °C Decomposition Temperature: Not Established

(H2O=1):

Vapour Density (air = 1): 4.8 Auto ignition temperature:  $>230^{\circ}\text{C}$  ( $446^{\circ}\text{F}$ )

Vapour Pressure: ~ 648 kPa @ 20°C Flammable limits (estimated): LOWER: 1%

UPPER: 7%

Melting Point: Not Established Partition Coefficient Not Established (octanol/water):

pH: Not Applicable Odour Threshold: Not Established

**Heat of combustion:** 25 – 30 kJ/g **Viscosity:** Not Established

**Volatiles:** 70 - 80%

#### Section 10 - Chemical Stability and Reactivity

Chemical Stability: Product is stable under recommended storage conditions.

Conditions to Avoid: Exposure to direct sunlight for extended periods. Temperatures in excess of 50°C.

Incompatibility: 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

#### **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.



Revision Date: 28 January 2011 Supercedes: 15 October 2010

#### **B: Component Analysis**

Ingredients	EC No.	LC-50	LD-50
Distillates (Petroleum), Hydrotreated Light	265-149-8	21400 mg/m <sup>3</sup> /rat/4H*	34600 mg/kg/oral/rat 15400 mg/kg/dermal/rabbit
Distillates Petroleum Hydrotreated Heavy	265-157-1	Not established	>5000 mg/kg/oral/rat* >5000 mg/kg dermal/rabbit/24H*
Acetone	200-662-2	16000 ppm/rat/4H*	5800 mg/kg /rabbit/oral* 20000 mg/kg/dermal/rabbit
Propylene Glycol Mono-n-butyl Ether	225-878-4	Not Established	2124-2700 mg/kg/oral/ rat/female 2612-5500 mg/kg oral/rat/male
Light Mineral Spirits /Stoddard Solvent or Solvent Naphtha (petroleum), medium aliphatic	232-489-3 or 265-191-7	>5500 mg/m <sup>3</sup> /rat/4H*	>5000 mg/kg/oral/rat* >3000 mg/kg/dermal/rat*
Carbon Dioxide	204-696-9	470000 ppm/rat/30 min	Not appropriate

<sup>\*</sup> Supplier Data

Note L: component 265-157-1 has been tested by Supplier. According to Supplier, the component complies with the criteria of Note L in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 3% DMSO)

Note P: component 232-489-3 has been tested by Supplier. According to Supplier, the component complies with the criteria of Note P in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 0.1% benzene)

#### Section 12 – Ecological Information

**Mobility:** Semi-volatile. Readily absorbed **Persistence and** Only slightly biodegradable.

into soil. degradability:

Bioaccumulative No bioaccumulation potential Other adverse effects: None known.

potential:

### Component Information Acute Aquatic Toxicity

Effect on Organisms	Component	EC No.	Test	Species	Results
Acute Toxicity on Fishes	Distillates (Petroleum), Hydrotreated Light	265-149-8	96-hr LC50	Oncorhynchus mykiss	3200 ug/L*
	Dipropylene Glycol n-Butyl Ether*	225-878-4	96-hr LC50	Poecilia reticulate	560-1000 mg/L*
Acute Toxicity on Daphnia	Dipropylene Glycol n-Butyl Ether*	225-878-4	LC <sub>50</sub>	Daphnia	>1000 mg/L*
Bacterial inhibition					
Growth inhibition of algae			No Data Available		
Bioaccumulation in fish					

<sup>\*</sup>Supplier Data

For the 265-149-8 component, no toxicity has been observed in water due to extremely low water solubility. However, hydrocarbon and petroleum distillates are potentially toxic to freshwater and saltwater ecosystems. If material is spilled on soil, some potential toxic effects could occur before biodegradation could remove material.

If spilled, the 265-157-1 constituent may kill grasses and small plants by interfering with transpiration. Spilled material may coat gill structures of fish resulting in suffocation if spilled in shallow, running water. This product may be toxic to amphibians by preventing dermal respiration. This product may also cause gastrointestinal distress to birds and mammals through ingestion.



Revision Date: 28 January 2011 Supercedes: 15 October 2010

#### Section 13 – Disposal Considerations

Disposal: Waste must be disposed of in accordance with national and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate.

### **Section 14 – Transportation Information**

Road/Rail - ADR/RID	UN No.:	1950	ADR Class:	2
	Packing Group:	NA	Classification Code:	5F
	Name and description:	Aerosols, Flammable	Hazard ID No.:	NA
	Labeling:	2.1	Technical Name:	NA
	UN No.:	1950	Class:	2
IMDG-IMO	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
	UN No.:	1950	Class:	2.1
IATA - ICAO:	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.

#### Section 15 – Regulatory Information

Warning Symbol(s):





**Risk Phrases:** R-12 Extremely Flammable

R-36/38 Irritating to eyes and skin.

R-66 Repeated exposure may cause skin dryness or cracking.

R-67 Vapours may cause drowsiness and dizziness.

> Remark: The classification for aspiration hazards (R65), does not apply for products placed on the market in aerosol containers. (EU-Directive 67/548

Annex VI 9.4)

S-2 Safety Phrases: Keep out of the reach of children.

> S-16 Keep away from sources of ignition – no smoking.

S-23 Do not breathe vapour / spray.

Avoid contact with skin. S-24

S-26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

**Precautionary** 

Pressurized container: protect from sunlight and do not expose to Phrases: temperatures exceeding 50°C. Do not pierce or burn, even after use. Do

not spray on a naked flame or any incandescent material.



Revision Date: 28 January 2011 Supercedes: 15 October 2010

#### Section 16 – Other Information

**User Notes:** 

The purpose of the above information is to describe this product only in terms of Health and Safety requirements. The information given therefore, should not be construed as guaranteeing specific properties or specification. Customers should satisfy themselves as to the suitability and completeness of this information for their own particular use, bearing in mind any other Health and Safety legislation or regulations. The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is construed as a warranty or representation. Statements concerning the use of the products described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is to be assumed.

Information Sources:

ESIS: European Chemical Substances Information

HSE EH40 Occupation Exposure Limits.

Suppliers Safety Data Sheets.

Full R-Phrases

R 11 Highly Flammable.

R 12 Extremely Flammable

R 36 Irritating to eyes

R36/38 Irritating to eyes and skin

R 65 Harmful: may cause lung damage if swallowed.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.