



# SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Aerosol Spray Can

Revision 3

Revision Date 4/6/09

Supersedes: 27/4/09

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

**Product Name:** LPS<sup>®</sup> HARDCOAT CORROSION INHIBITOR (AEROSOL SPRAY CAN)

**Part Numbers:** M03316

**Product Use:** A spray corrosion inhibitor designed to displace water and penetrate to form a barrier against moisture, air, acids, alkali fumes, and other corrosive elements on metals parts.

**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 30085 (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. May cause heritable genetic damage. 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
Hydrocarbon Aerosol Propellant <sup>Note 3</sup>	270-704-2	68476-85-7	[F+] R12; [T] R45, R46	20 - 30%
Stoddard Solvent <sup>Note 1</sup>	232-489-3	8052-41-3	[T] R45, R46; [Xn] R65	20 - 30%
Acetone	200-662-2	67-64-1	[F] R11; [Xi] R36, R66,R67	20 - 30%
Distillates (Petroleum), hydrotreated Heavy paraffinic <sup>Note 2</sup>	265-157-1	64742-54-7	[T] R45	1 - 5%
Petrolatum <sup>Note 4</sup>	232-373-2	8009-03-8	[T] R45	1 – 5%

Note 1: 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) 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)

Note 2: 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 3: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note K in Annex I of 67/548/EEC, and is exempt from a classification of T; R45, R46. (Contains less than 0.1% 1, 3 butadiene)

Note 4: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note N in Annex I of 67/548/EEC, and is exempt from a classification of T; R45.



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### Section 4 – First Aid Measures

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- 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:** Wash with soap and water. Get 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.

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### Section 5 – Fire Fighting Measures

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**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.

**Firefighting media:** SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use 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.

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### Section 6 – Accidental Release Measures

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**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'.

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### Section 7 – Handling and Storage

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**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.



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### Section 8 – Exposure Controls / Personal Protection

Component	EC No.	UK LT EXP (8 hrs.)	UK ST EXP (15 min.)	Other
Hydrocarbon Aerosol Propellant	270-704-2	1000 ppm	1250 ppm	1000 ppm NIOSH REL 10H TWA
Stoddard Solvent	232-489-3	Not Established	Not Established	100 ppm ACGIH TLV
Distillates (Petroleum), Hydrotreated Heavy paraffinic	265-157-1	5 mg/m <sup>3</sup> (Oil Mist)	10 mg/m <sup>3</sup> (Oil Mist)	5 mg/m <sup>3</sup> ACGIH-TLV 10 mg/m <sup>3</sup> ACGIH-STEL (Oil Mist)
Acetone	200-662-2	500 ppm	1500 ppm	500 ppm ACGIH TLV; 750 ppm 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.

**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.



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### Section 9 – Physical and Chemical Properties

<b>Appearance:</b>	Viscous liquid.	<b>Colour:</b>	Medium to dark brown
<b>Odour/Taste:</b>	Cherry.	<b>Vapour Pressure:</b>	0.35 kPa (at 20 °C) dispensed liquid
<b>Solubility Description:</b>	5% in water.	<b>Evaporation Rate:</b>	0.2(BuAc=1)
<b>Boiling Point (°C):</b>	160 @ 101 kPa	<b>Flash Point (°C):</b>	<21°C
<b>Specific Gravity (Water=1):</b>	0.80-0.85 @ 20 °C	<b>Flash Point Method:</b>	Open Cup.
<b>Vapour Density (air=1):</b>	~4.8	<b>Auto Ignition Temperature (°C):</b>	>228°C
<b>V.O.C. Content:</b>	50.7%, 442 g/L	<b>Partition Coefficient (octanol/water):</b>	<1
<b>Flammable limits (estimated):</b>	LOWER: 0.6% UPPER:6%	<b>Viscosity:</b>	0.34 cm <sup>2</sup> /second at 25°C
<b>pH:</b>	Not applicable		

### Section 10 – Chemical Stability and Reactivity

<b>Chemical Stability:</b>	Product is stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	Exposure to direct sunlight for extended periods. Temperatures in excess of 50°C.
<b>Incompatibility:</b>	Reactive or incompatible with oxidizing agents.
<b>Hazardous Decomposition:</b>	Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include carbon monoxide and carbon dioxide.
<b>Hazardous Polymerization:</b>	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

Ingredients	CASRN	LC-50	LD-50
Acetone	200-662-2	50,100 mg/m <sup>3</sup> /8H/rat	5340 mg/kg /rabbit/oral >9400 µL/kg/guinea pig/dermal
Hydrocarbon Aerosol Propellant	270-704-2	658 mg/L/rat/4hr	Not appropriate
Stoddard Solvent	232-489-3	>5500 mg/m <sup>3</sup> /rat/4hr	>5000 mg/kg/oral/rat* >3000 mg/kg/dermal/rat*
Distillates Petroleum Hydrotreated Heavy	265-157-1	Not established	>5000 mg/kg oral/rat* >5 g/kg dermal/rabbit/24H*
Petrolatum	232-373-2	Not established	Intraperitoneal/mouse/ >50000 mg/kg

\* Supplier Data



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### Section 12 – Ecological Information

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

**Bioaccumulative potential:** No bioaccumulation potential      **Other adverse effects:** None known.

#### Component Information Acute Aquatic Toxicity

Component	EC No.	Test	Species	Results
Stoddard Solvent	232-489-3	96h-LC <sub>50</sub>	Fathead Minnow	800 mg/L
		48h-LC <sub>50</sub>	Daphnia Magna	>100 mg/L
Distillates (Petroleum), hydrotreated Heavy paraffinic	265-157-1	No Data Available		
Petrolatum	232-373-2			
Acetone	200-662-2	48-hour LC <sub>50</sub>	Carassius auratus	1.4 %
		2-hour LC <sub>50</sub>	Danio rerio	100,000 µ/L
		96-hour EC <sub>50</sub>	Pimephales promelas	>10,000 mg/L

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.

### 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	<b>UN no:</b>	1950	<b>ADR Class:</b>	2
	<b>Packing group:</b>	NA	<b>Classification code:</b>	5F
	<b>Name and Description:</b>	AEROSOLS, Flammable	<b>Hazard ID no:</b>	NA
	<b>Labeling:</b>	2.1		
IMDG-IMO	<b>UN no:</b>	1950	<b>Class:</b>	2
	<b>Shipping Name:</b>	AEROSOLS	<b>Subsidiary Risk:</b>	2
	<b>Packing Instructions:</b>	P003, LP02	<b>Packing group:</b>	NA
	<b>Marine pollutant:</b>	NO	<b>EmS:</b>	F-D, S-U
IATA-ICAO	<b>UN no:</b>	1950	<b>Class:</b>	2.1
	<b>Shipping Name:</b>	AEROSOLS, Flammable	<b>Subclass:</b>	NA
	<b>Packing instructions:</b>	203, Y203 (Ltd. Qty)	<b>Packing group:</b>	NA
	<b>Labeling:</b>	Flammable Gas		



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### Section 15 – Regulatory Information

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<b>Warning Symbol(s):</b>	F+,T
<b>Risk Phrases:</b>	R-12 Extremely Flammable. R-46 May cause heritable genetic damage. R-36 Irritating to eyes. R-66 Repeated exposure may cause skin dryness or cracking. R-67 Vapours may cause drowsiness and dizziness. <i>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)</i>
<b>Safety Phrases:</b>	S-2 Keep out of the reach of children. S-16 Keep away from sources of ignition – no smoking. S-23 Do not breathe vapour / spray. S-51 Use only in well-ventilated areas. S-53 Avoid exposure - obtain special instructions before use. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Precautionary Phrases:</b>	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.



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### Section 16 – Other Information

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**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.
- R 45 May cause cancer.
- R 46 May cause heritable genetic damage.
- 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.