



# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

### Section 1 • Product and Company Identification

**Product Name:** LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

**Part Number:** 03328, 03305, 03355, C03328, C03305, C03355

**Chemical Name:** Petroleum Hydrocarbon mixture

**Product Use:** A 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.

**Manufacturer Information:** LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA, USA 30084

**TEL:** 1 770-243-8880

**Emergency Telephone Number:** 1-800-424-9300 Chemtrec;  
Outside U.S.: (703) 527-3887

**FAX:** 1 770-243-8899

**Website:** <http://www.lpslabs.com>

#### PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably won't help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, don't hesitate to call us at 800/241-8334.

#### Worker Toxicity

LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk is an industrial chemical - a specialized coating designed to prevent rust and corrosion on steel, aluminum and other metals. It contains "mineral spirits" and mineral oil which can be irritating to skin at a minimum and if handled improperly can be dangerous. We suggest you wear gloves and avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breath large amounts of the vapor, (it will dry out your nasal passages and if you breathe large amounts in poorly ventilated areas it can make you dizzy and even sick). Do not use LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk for extended periods without adequate ventilation. If you're going to perform work involving a lot of product in a poorly ventilated area, use of a respirator or self-contained breathing equipment may be required. For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

#### Flammability

LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk is combustible, having a flash point above 100° F and an auto ignition temperature over 400° F. Under normal use conditions flammability isn't a concern, but don't spray the product onto red-hot metal surfaces.

#### Disposal

If you spill LPS HARDCOAT CORROSION INHIBITOR, notify the proper environmental or safety department at your company right away. If LPS HARDCOAT CORROSION INHIBITOR becomes contaminated with another substance and is rendered unusable for protecting metal items from rust, the resulting mixture may fall under a hazardous classification. See section 13 for more details.



# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

---

### 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:

DANGER: Combustible. Harmful or Fatal if Swallowed.

**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. The solvent portion of this product can also be absorbed through the skin and produce CNS depression effects.

**Inhalation:** Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or headache. In extreme cases (overexposure in a confined space for example), the vapors of the solvent portion can cause disorientation, difficulty with breathing, unconsciousness, and other effects depending upon the level of overexposure and duration.

**Ingestion:** This product has a low order of acute oral toxicity, but ingestion of large quantities will cause central nervous system depression and gastrointestinal irritation. Symptoms include a burning sensation to the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and other central nervous system effects. May cause injury if aspirated into lungs.

#### Potential Chronic Health Effects:

**Carcinogenic Effects:** NTP: No IARC: No OSHA: No

**Mutagenic Effects:** None

**Teratogenic Effects:** 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.



# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supercedes: 11/3/08

---

### Section 3 • Composition / Information on Ingredients

---

Component	CASRN	Percent by Weight
Mineral Spirits	8052-41-3/64742-88-7	40 - 50%
Distillates Petroleum Hydrotreated Heavy Paraffinic	64742-54-7	5 - 10%
Dipropylene Glycol Monomethyl Ether	34590-94-8	1 - 5%

*\*The remaining ingredients of this preparation are not classified as hazardous per 29 CFR 1920.1200 Subpart Z*

---

### 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.

**Firefighting media:** Use CO<sub>2</sub>, DRY chemical powder, 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):** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles.

**Special Remarks on Explosion Hazards:** Apply water to containers to keep them cool. Heated containers will burst.



# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

### Section 6 • Accidental Release Measures

**Containment Procedures**

Contain and recover spilled liquid when possible.

**Clean-Up Procedures****Small Spill and Leak:**

Eliminate all ignition sources. Absorb with an inert material and dispose of properly.

**Large Spill and Leak:**

Eliminate all 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.

**Evacuation Procedures**

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

**Special Procedures**

Remove all sources of ignition. Ventilate area. Wear appropriate protective equipment during cleanup.

### Section 7 • Handling and Storage

**Handling:** Eliminate ignition sources. Avoid contact with eyes, skin and clothing. Wear appropriate protective equipment during handling. Keep container closed. Do not breathe 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 below 100°F.

**Precautions to be taken in handling and storage:** Store all materials in dry, well-ventilated area. Avoid breathing vapors.

### Section 8 • Exposure Controls / Personal Protection

**Exposure Guidelines:**

Component	CASRN	OSHA TWA-PEL	OSHA STEL	ACGIH-TLV	ACGIH-STEL	NIOSH REL
Mineral Spirits	8052-41-3 64742-88-7	500 ppm 2900 mg/m <sup>3</sup>	Not Established	100 ppm 525 mg/m <sup>3</sup>	Not Established	350 mg/m <sup>3</sup> 10-hr TWA 1800 mg/m <sup>3</sup> 15-min Ceiling
Distillates Petroleum Hydrotreated Heavy Paraffinic	64742-54-7	5 mg/m <sup>3</sup> (Oil Mist)*	Not Established	5 mg/m <sup>3</sup> (Oil Mist)*	Not Established	Not Established
Dipropylene Glycol Methyl Ether	34590-94-8	100 ppm	Not Established	100 ppm	150 ppm	100 ppm

\* Supplier Recommendation



# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

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

**Personal Protection:**

**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 can get on skin during use, use chemical resistant gloves (i.e., solvent resistant laminate film type Ansell LCP<sup>®</sup>) 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

---

<b>Appearance:</b>	Viscous liquid.	<b>Color:</b>	Medium to dark brown
<b>Odor/Taste:</b>	Cherry.	<b>Vapor Pressure:</b>	2.6 mmHg (at 20°C)
<b>Solubility Description:</b>	Insoluble in cold water.	<b>Evaporation Rate:</b>	0.2(BuAc=1)
<b>Boiling Point:</b>	160°C (320°F)	<b>Flash Point:</b>	42° to 45°C (107° to 113°F)
<b>Specific Gravity (Water=1):</b>	0.87-0.89	<b>Flash Point Method:</b>	Tag-Closed Cup.
<b>Vapor Density (Air=1):</b>	4.8	<b>Auto Ignition Temperature (°C):</b>	>230°C (446°F)
<b>V.O.C. Content:</b>	51.4%,3.8#/gal,451g/L per CARB/OTC/EPA	<b>Partition Coefficient (octanol/water):</b>	Not Determined
<b>Flammable limits (estimated):</b>	LOWER: 0.6% UPPER: 6.0%	<b>Viscosity:</b>	30.6 cSt
<b>pH:</b>	Not Applicable	<b>Odor threshold</b>	Not Determined
<b>Melting Point</b>	Not Determined	<b>Volatiles:</b>	48%
<b>Decomposition Temperature</b>	Not Determined		





**MATERIAL SAFETY DATA SHEET**  
**LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk**

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

**Section 12 • Ecological Information**

**Mobility:** Semi-volatile. Readily absorbed into soil.      **Persistence and degradability:** Not readily biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential      **Other adverse effects:** See below \*\*

**Ecotoxicology:**

Effect on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	Mineral Spirits	8052-41-3 64742-88-7	96h-LC <sub>50</sub>	Fathead Minnow	800 mg/L
	Distillates Petroleum Hydrotreated Heavy	64742-54-7	96h-LC <sub>50</sub>	Oncorhynchus mykiss	> 1000 mg/L
Acute Toxicity on Daphnia	Mineral Spirits	8052-41-3 64742-88-7	48h-LC <sub>50</sub>	Daphnia Magna	>100 mg/L
Bacterial inhibition	No Data Available				
Growth inhibition of algae	Mineral Spirits	8052-41-3 64742-88-7	96h-EC <sub>50</sub>	Algae	450 mg/L
Bioaccumulation in fish	No Data Available				

\*\*If spilled, the 64742-54-7 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**

**Waste Status:** This product has the RCRA characteristic of ignitability and if discarded would have the hazardous waste code D001.

**Disposal:** Waste must be disposed of in accordance with federal, state 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. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.





# MATERIAL SAFETY DATA SHEET

## LPS<sup>®</sup> HardCoat Corrosion Inhibitor Bulk

Revision 4

Revision Date: 2/3/09

Supersedes: 11/3/08

### State Regulations

#### New Jersey RTK:

**Bulk:** Mineral Spirits 8052-41-3/64742-88-7 • Aromatic Hydrocarbon Resin 68410-16-5 • Distillates Petroleum, Hydrotreated Heavy Paraffinic 64742-54-7 • Petrolatum 8009-03-8 • Hydrotreated Microcrystalline Wax 64742-60-5 • Dipropylene Glycol Methyl Ether 34590-94-8

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

**California and OTC States:** This product is not regulated.

### International Regulations

**Canadian Environmental Protection Act:** 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:** Bulk  
Class B3, 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

MSDS# 13328 Responsible Name: Clea Johnson Regulatory Affairs Coordinator	HMIS 1996		HMIS III		<b>NFPA</b> Flammability  Health      Reactivity
	Health:	1	Health:	[/]1	
	Flammability:	2	Flammability:	2	
	Reactivity	0	Physical Hazard:	2	

#### 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.

Clea Johnson, Regulatory Affairs Coordinator  
LPS Laboratories, A division of Illinois Tool Works