MATERIAL SAFETY DATA SHEET
LPS® Cold Galvanize

Revision 3 **Revision Date: 3/27/09** **Supercedes: 8/20/2007**

Section 1 • Product and Company Identification

Product Name:	LPS® Cold Galvanize
Part Number:	00516, C00516
Chemical Name:	Blended Compound
Product Use:	A zinc rich industrial maintenance primer designed for rust and corrosion protection.
Manufacturer Information:	LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA, USA 30084
TEL:	1 770-243-8800
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® Cold Galvanizer is a zinc rich industrial maintenance primer for rust and corrosion protection. It is gray and opaque in color, and has a solvent odor. It is designed to prevent and repair rust and corrosion on the exterior of metal structures, metal parts, and metal structural components. It contains acetone and zinc metal that can be irritating to skin. 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). Don't spray LPS® Cold Galvanizer 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 1

Flammability

LPS® Cold Galvanize is extremely flammable exhibiting a flame extension. The dispensed liquid has a flash point less than 20°C and an auto ignition temperature over 465°C. Avoid sparks or open flame. See sections 5 and 9 of the MSDS for additional information.

Disposal

LPS® Cold Galvanize must be disposed of as hazardous waste. Dispose of in accordance with local, state and federal regulations. See section 13 for more details.

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: Extremely Flammable. Contents under pressure. 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), severe depression of the central nervous system can take place.

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: See Section 11

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, tearing, redness, and swelling of eyes. Repeated or prolonged skin contact can cause skin dryness or cracking. 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. Ingestion of this material may cause nausea, vomiting, and diarrhea. As a result of vomiting, inhalation into the lungs may cause pulmonary injury.

Section 3 • Composition / Information on Ingredients

Component	CASRN	Percent by Weight (%)
Zinc Metallic	7440-66-6	30 – 40
Acetone	67-64-1	30 – 40
Propane/Isobutane blend	68476-85-7	20 – 30
Aliphatic Hydrocarbon	8052-41-3	1 – 5
Zinc Oxide	1314-13-2	1 – 5
Xylene	1330-20-7	.1 – 1
Ethylbenzene	100-41-4	.1 - 1

**All remaining materials are not classified as "hazardous" per 29 CFR 1900.1200 Subpart*

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). Get medical attention. 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: Hydrocarbons

Firefighting media:

Small Fire: Use DRY chemical powder.
Large Fire: Foam, dry chemical, carbon dioxide. Avoid water. If aerosols are not yet involved in fire, cool containers with water jet to prevent pressure build-up auto ignition or explosion.

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:

Aerosols may explode upon heating, spread fire and overcome sprinkler systems**.** Zinc dust in contact with water evolves hydrogen. An explosive condition may develop if this should happen in a confined space.

Section 6 • Accidental Release Measures

Containment Procedures Contain and recover spilled liquid when possible.

Clean-Up Procedures

Small Spill and Leak: Eliminate ignition sources. Absorb with an inert material and dispose of properly.

Large Spill and Leak: Eliminate 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: DO NOT spray into or around ignition sources. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. DO NOT breathe vapors or spray mists.

Storage: Keep container in a cool, well-ventilated area. DO NOT store near sources of ignition (spark or flame). Store below 120°F.

Precautions to be taken in handling and storage: *Store as Level 3 Aerosol (NFPA 30B).* Store all materials in dry, well-ventilated area. DO NOT breathe vapors.

Section 8 • Exposure Controls / Personal Protection

Exposure Guidelines:

Components	CASRN	OSHA		ACGIH		NIOSH
		TWA/PEL	STEL	TWA	STEL	TWA/REL
Acetone	67-64-1	1000 ppm	NE	500 ppm	750 ppm	250 ppm
Zinc Metal	7440-66-6	5 mg/m^{3*}	NE	5 mg/m^{3*}	NE	NE
Propane/Isobutane blend	68476-85-7	1000 ppm	NE	1000 ppm	NE	1000 ppm
Aliphatic Hydrocarbon	8052-41-3	500 ppm	NE	100 ppm	NE	300 mg/m^3
Zinc Oxide	1314-13-2	5 mg/m^{3*}	NE	2 mg/m^{3*}	10	5 mg/m^{3*}
Xylene	1330-20-7	100 ppm	NE	100 ppm	150 ppm	100 ppm
Ethylbenzene	100-41-4	100 ppm	NE	100 ppm	125 ppm	100 ppm

NE- Not Established, * nuisance dust

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Personal Protection:

Eyes: Wear chemical splash glasses/goggles/face shield when eye and/or face contact is possible due to splashing or spraying of material.

Respiratory: Use appropriate respirator if ventilation is inadequate.

Hands: Use solvent resistant gloves.

General Hygiene Considerations:

Avoid breathing mist. Avoid eye and skin contact. Have eye-wash facilities immediately available. Wash thoroughly after handling and before eating or drinking.

Section 9 • Physical and Chemical Properties

Appearance:	Light gray opaque liquid	**Color:**	Light gray
Odor/Taste:	Mild/sweet	**Vapor Pressure:**	102.8 mmHg
Solubility Description:	Insoluble in water	**Evaporation Rate:**	9
Boiling Point:	56 °C/133 °F	**Flash Point (°C): (dispensed liquid)**	<20 °C/68 °F
Specific Gravity: (Water=1)	1.47	**Flash Point Method:**	TCC
Vapor Density: (air=1)	2	**Auto Ignition Temperature (°C):**	465 °C/ 869 °F
V.O.C. Content: (Calculated)	265 g/L	**Partition Coefficient (octanol/water):**	NA*
Flammable limits: (estimated)	LEL:1.8% UEL: 9.5%	**Viscosity:**	5cps
pH:	NA	**Volatiles:**	59%

*NA- Not Applicable

Section 10 • Stability and Reactivity

Stability and Reactivity: The product is stable.

Incompatibility with Various Substances: Extremely reactive or incompatible with oxidizing agents. Avoid water.

Hazardous decomposition products: These products are hydrocarbons.

Hazardous polymerization: None

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.

Following exposure to vapors, this material can produce central nervous system depression. High atmospheric concentrations can result in eye, nasal and respiratory tract irritation. However, if handled in accordance with good industrial hygiene practice, this product will not present a significant hazard in the workplace.

B: Component Analysis

Components	CASRN	LC-50	LD-50
Acetone	67-64-1	16000 ppm/rat/4H*	5800 mg/kg/oral/rat* 20000 mg/kg/dermal/rabbit
Zinc Metallic	7440-66-6	Not Established	Not Established
Propane/ Isobutane blend	68476-85-7	Not Established	Not Established
Aliphatic Hydrocarbon	8052-41-3	>6.1 mg/L/rat*	>5 g/kg/oral/ rat*
Zinc Oxide	1314-13-2	2500 mg/m^{3}rat	7950 mg/kg/oral/rat
Xylene	1330-20-7	5000 ppm/ rat/4H	2119 mg/kg/oral/rat
Ethylbenzene	100-41-4	35500 mg/m^3 inhalation/2H/rat	3500 mg/kg oral/rat

Carcinogenicity

Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. The International Agency for Research and Cancer (IARC) has classified Ethylbenzene as a possible carcinogen to humans

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:**	Highly toxic to the aquatic environment.

Component Data: Acute Aquatic Toxicity

Ecotoxicology:

Effect on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	Acetone	67-64-1	96 h LC_{50}	Albumus Albumus	11,000 mg/L
	Zinc Metallic	7440-66-6	96 h LC_{50}	Cypris Subglobosa	8352 ug/L
	Propane/Isobutane blend	68476-85-7	See below	See below	See below
	Aliphatic Hydrocarbon	8052-41-3	96 h LC_{50}	Fathead Minnow	2200 mg/L
	Xylene	1330-20-7	96 h LC_{50}	Carassius Auratus	36810 ug/L
	Zinc Oxide	1314-13-2	96 h LC_{50}	Oncorhynchus mykiss	1100 ug/L
	Ethylbenzene	100-41-4	96 h LC_{50}	Carassius Auratus	94400 ug/L
Acute Toxicity on Daphnia	No Data Available				
Bacterial inhibition					
Growth inhibition of algae					
Bioaccumulation in fish					

The acute/prolonged toxicity test substances for 68476-85-7 were methane, propane, butane. Significant losses of these test substances by evaporation were likely to occur when these studies were performed. The calculated 96 h LC_{50} value for propane is 13.0 mg/L and for butane 6.0 mg/L. No analytical ecological monitoring test data is available.

Special Remarks on Ecological Toxicity: This product is highly toxic to the aquatic environment.

Section 13 • Disposal Considerations

Waste Status: Aerosol products, if depressurized and emptied to less than 2.5 cm of fluid contents are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). If disposed of in its received form, this item carries waste code D001 and D003. (U.S.)

Disposal: Waste must be disposed of in accordance with national, regional, provincial, 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.

Section 14 • Transport Information

D.O.T. Ground	**Shipping Name:**	Consumer Commodity	**UN Number:**	NA
	Hazard Class:	ORM-D	**Technical Name:**	NA
	Subclass:	NA	**Hazard Label:**	ORM-D Already on box
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		
IMDG-IMO	**UN no:**	1950	**Class:**	2
	Shipping Name:	AEROSOLS	**Subsidiary Risk:**	2
	Packing Instructions:	P003, LP02	**Packing group:**	NA
	Marine pollutant:	NO	**EmS:**	F-D, S-U
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		

Section 15 • Regulatory information

U.S. Federal Regulations

RCRA Hazardous Waste No.: D001, D003 (aerosols only)

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):
Acetone 67-64-1 5000lbs.; Zinc 7440-66-6 1000 lbs.; Xylene 1330-20-7 100lbs.; Ethylbenzene 100-41-4 1000 lbs.

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 (aerosols only), Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) 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): Ethylbenzene 100-41-4; Xylene 1330-20-7;

State Regulations

New Jersey RTK:
Acetone 67-64-1 ● Zinc 7440-66-6 ● Propane/Isobutane Blend 68476-85-7 ● Aliphatic Hydrocarbon 8052-41-3 ● Zinc Oxide 1314-13-2 ● Xylene 1330-20-7 ● Ethylbenzene 100-41-4

California: This product contains 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 by consumer regulations.

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: Aerosol
Class A, Class B5, Class D2A, Class D2B

Section 16 • Other Information

	HMIS 1996	HMIS III	NFPA
MSDS# 10516 Responsible Name: Clea Johnson Regulatory Affairs Coordinator	Health: 2	Health: [*]2	Flammability Health 3 2 0 Reactivity
	Flammability: 3	Flammability: 3	
	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.

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A division of Illinois Tool Works