



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name LPS® Cold Galvanize
Version # 02
Issue date 05-25-2012
Revision date 06-13-2012
Supersedes date 05-25-2012
CAS # Mixture
Part Number 05128
Product use A zinc rich industrial maintenance primer designed for rust and corrosion protection.
Manufacturer information LPS Laboratories, a division of Illinois Tool Works
4647 Hugh Howell Rd
Tucker, GA 30084 United States
www.lpslabs.com
1-800-241-8334 / 770-243-8800
Chemtrec 1-800-424-9300

2. Hazards Identification

Emergency overview DANGER

FLAMMABLE LIQUID AND VAPOR.
Will be easily ignited by heat, spark or flames.

May be fatal if swallowed. May be fatal if inhaled. Possible cancer hazard - may cause cancer based on animal data. May cause skin irritation. Prolonged exposure may cause chronic effects.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Very toxic in contact with eyes. Avoid contact with eyes.
Skin Very toxic in contact with skin. Avoid contact with the skin.
Inhalation Very toxic by inhalation. Prolonged inhalation may be harmful. Do not breathe dust/fume/gas/mist/vapors/spray.
Ingestion Very toxic if swallowed. Components of the product may be absorbed into the body by ingestion. Do not ingest.
Target organs Central nervous system. Eyes. Kidneys. Respiratory system. Skin.
Chronic effects Edema. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.
Signs and symptoms Narcosis. Decrease in motor functions. Behavioral changes. Edema. Proteinuria.
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

Components	CAS #	Percent
Metallic Zinc	7440-66-6	60 - 80
ACETONE	67-64-1	2.5 - 10
Mineral Spirits Regular Stoddard Solvent	8052-41-3	2.5 - 10
Zinc Oxide	1314-13-2	2.5 - 10
Butanol Normal	71-36-3	1 - 2.5
Xylene	1330-20-7	1 - 2.5

Components	CAS #	Percent
Zeolite (crystalline aluminosilicate)	1318-02-1	1 - 2.5
1,2,4-Trimethylbenzene	95-63-6	0.1 - 1
Ethylbenzene	100-41-4	0.1 - 1
Other components below reportable levels		10 - 20

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 immediately.
Skin contact	Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin.
Inhalation	Move to fresh air. Call a physician or poison control center immediately.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Never give anything by mouth to a victim who is unconscious or is having convulsions. Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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. Immediate medical attention is required.

5. Fire Fighting Measures

Flammable properties

Flammable by OSHA criteria. Heat may cause the containers to explode. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media Dry sand. Powder.

Unsuitable extinguishing media Water. 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 and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. 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. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

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 the flow of material, if this is without risk. Dike the spilled material, where this is possible. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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.

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. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage**Handling**

Vapors may form explosive mixtures with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Avoid release to the environment.

Storage

Store locked up. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
1,2,4-Trimethylbenzene (95-63-6)	TWA	25 ppm	
ACETONE (67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Butanol Normal (71-36-3)	TWA	20 ppm	
Ethylbenzene (100-41-4)	TWA	20 ppm	
Mineral Spirits Regular Stoddard Solvent (8052-41-3)	TWA	100 ppm	
Xylene (1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	
Zeolite (crystalline aluminosilicate) (1318-02-1)	TWA	1 mg/m3	Respirable fraction.
Zinc Oxide (1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

US. ACGIH. BEIs. Biological Exposure Indices

Components	Type	Value
ACETONE (67-64-1)	BEI	50 mg/l
Ethylbenzene (100-41-4)	BEI	0.7 g/g
Xylene (1330-20-7)	BEI	1.5 g/g

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ACETONE (67-64-1)	PEL	2400 mg/m3 1000 ppm	
Butanol Normal (71-36-3)	PEL	300 mg/m3 100 ppm	
Ethylbenzene (100-41-4)	PEL	435 mg/m3 100 ppm	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Mineral Spirits Regular Stoddard Solvent (8052-41-3)	PEL	2900 mg/m3	
Xylene (1330-20-7)	PEL	500 ppm 435 mg/m3	
Zinc Oxide (1314-13-2)	PEL	100 ppm 5 mg/m3 5 mg/m3 15 mg/m3	Respirable fraction. Fume. Total dust.

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye / face protection**

Eye wash fountain is recommended.

Skin protection

Chemical resistant gloves.

Respiratory protection

Wear suitable respiratory protection.

General hygiene considerations

Do not get in eyes. Do not get this material in contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Light grey Opaque.
Odor	Aromatic. Hydrocarbon-like.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	102.8 mm Hg estimated
Vapor density	> 2
Boiling point	280.4 °F (138 °C) estimated
Solubility (water)	Not available.
Specific gravity	2.3 @ 25°C
Relative density	Not available.
Flash point	< 80.60 °F (< 27.00 °C) estimated
Flammability limits in air, upper, % by volume	7 % estimated
Flammability limits in air, lower, % by volume	1.2 % estimated
Auto-ignition temperature	980.6 °F (527 °C) estimated
VOC	314 g/l estimated
Viscosity	6500 cPs
Other data	
Flammability class	Flammable IC estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Toxic gas.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	May be harmful in contact with skin.
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Local effects Very toxic by inhalation, in contact with skin and if swallowed.

Chronic effects Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.

Subchronic effects Kidney injury may occur.

Carcinogenicity Possible cancer hazard - may cause cancer based on animal data.

ACGIH Carcinogens

ACETONE (CAS 67-64-1)	A4 Not classifiable as a human carcinogen.
Ethylbenzene (CAS 100-41-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Xylene (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.
Zeolite (crystalline aluminosilicate) (CAS 1318-02-1)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.
Zeolite (crystalline aluminosilicate) (CAS 1318-02-1)	3 Not classifiable as to carcinogenicity to humans.

Neurological effects Hazardous by OSHA criteria.

Reproductive effects Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

Teratogenicity Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

Further information Symptoms may be delayed.

12. Ecological Information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability Not available.

Bioaccumulation / Accumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

ACETONE	-0.24
Butanol Normal	0.88
Xylene	3.12 - 3.2
Ethylbenzene	3.15
Mineral Spirits Regular Stoddard Solvent	3.16 - 7.15

Partition coefficient

ACETONE	-0.24
Butanol Normal	0.88
Xylene	3.12 - 3.2
Ethylbenzene	3.15
Mineral Spirits Regular Stoddard Solvent	3.16 - 7.15

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F

US RCRA Hazardous Waste U List: Reference

ACETONE (CAS 67-64-1)	U002
Butanol Normal (CAS 71-36-3)	U031
Xylene (CAS 1330-20-7)	U239

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

General DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

DOT

Basic shipping requirements:

UN number	UN1263
Proper shipping name	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base, MARINE POLLUTANT
Hazard class	3
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions	Read safety instructions, MSDS and emergency procedures before handling.
Additional information:	
Special provisions	B1, B52, IB3, T2, TP1, TP29
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242

IATA

UN number	UN1263
UN proper shipping name	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base
Transport hazard class(es)	3
Packing group	III
Environmental hazards	Yes
Labels required	3

IMDG

UN number	UN1263
UN proper shipping name	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base, MARINE POLLUTANT
Transport hazard class(es)	3
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Labels required	3

DOT



IATA; IMDG





15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components of this product are TSCA inventory listed and/or are exempt.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

ACETONE (CAS 67-64-1)	150 KG_W 50 GALLONS_V
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DEA Essential Chemical Code Number

ACETONE (CAS 67-64-1)	6532
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Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

ACETONE (CAS 67-64-1)	35 %WV
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DEA Exempt Chemical Mixtures Code Number

ACETONE (CAS 67-64-1)	6532
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US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1,2,4-Trimethylbenzene (CAS 95-63-6)	1.0 %
Butanol Normal (CAS 71-36-3)	1.0 %
Ethylbenzene (CAS 100-41-4)	0.1 %
Metallic Zinc (CAS 7440-66-6)	1.0 %
Xylene (CAS 1330-20-7)	1.0 %
Zinc Oxide (CAS 1314-13-2)	1.0 % N982

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1,2,4-Trimethylbenzene (CAS 95-63-6)	Listed.
Butanol Normal (CAS 71-36-3)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Metallic Zinc (CAS 7440-66-6)	Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc Oxide (CAS 1314-13-2)	Listed. N982

CERCLA (Superfund) reportable quantity

Metallic Zinc: 1000.0000
 ACETONE: 5000.0000
 Butanol Normal: 5000.0000
 Xylene: 100.0000
 Ethylbenzene: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	No
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State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004 Carcinogenic.
Quartz (CAS 14808-60-7)	Listed: October 1, 1988 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

2-ethylhexanoic acid (CAS 149-57-5) Listed: August 7, 2009 Developmental toxin.
Toluene (CAS 108-88-3) Listed: January 1, 1991 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Toluene (CAS 108-88-3) Listed: August 7, 2009 Female reproductive toxin.

US - New Jersey RTK - Substances: Listed substance

1,2,4-Trimethylbenzene (CAS 95-63-6) Listed.
ACETONE (CAS 67-64-1) Listed.
Butanol Normal (CAS 71-36-3) Listed.
Ethylbenzene (CAS 100-41-4) Listed.
Metallic Zinc (CAS 7440-66-6) Listed.
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3) Listed.
Xylene (CAS 1330-20-7) Listed.
Zinc Oxide (CAS 1314-13-2) Listed.

US - Pennsylvania RTK - Hazardous Substances: All compounds of this substance are considered environmental hazards

Metallic Zinc (CAS 7440-66-6) LISTED

US - Pennsylvania RTK - Hazardous Substances: Listed substance

1,2,4-Trimethylbenzene (CAS 95-63-6) Listed.
ACETONE (CAS 67-64-1) Listed.
Butanol Normal (CAS 71-36-3) Listed.
Ethylbenzene (CAS 100-41-4) Listed.
Metallic Zinc (CAS 7440-66-6) Listed.
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3) Listed.
Xylene (CAS 1330-20-7) Listed.
Zinc Oxide (CAS 1314-13-2) Listed.

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 3
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 3
Instability: 0

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

This data sheet contains changes from the previous version in section(s):

Physical & Chemical Properties: Multiple Properties