



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** LPS® Belt Dressing

**Other means of identification**

**Part Number** 02216

**Recommended use** A non-chlorinated, non-drying, water resistant spray dressing for extending the life of rubber drive belts by improving traction and allowing runs under reduced belt tension.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** LPS Laboratories, a division of Illinois Tool Works, Inc.

**Address** 4647 Hugh Howell Rd.  
Tucker, GA 30084

**Country** (U.S.A.)

**Tel:** +1 770-243-8800

**In Case of Emergency** 1-800-424-9300 (inside U.S.)  
+001 703-527-3887 (outside U.S.)

**Website** www.lpslabs.com

**E-mail** sds@lpslabs.com

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1

**Health hazards** Skin corrosion/irritation Category 2

Reproductive toxicity (fertility) Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated exposure Category 2

**OSHA hazard(s)** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** H222 - Extremely flammable aerosol.  
H315 - Causes skin irritation.  
H336 - May cause drowsiness or dizziness.  
H373 - May cause damage to central nervous system, liver, kidneys, and blood through prolonged or repeated exposure.  
H361 - Suspected of damaging fertility or the unborn child.

### Precautionary statement

#### Prevention

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Pressurized container: Do not pierce or burn, even after use.  
P260 - Do not breathe dust/fume/gas/mist/vapors  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/eye protection/face protection.  
P264 - Wash thoroughly after handling.  
P281 - Use personal protective equipment as required.  
P273 - Avoid release to the environment.

<b>Response</b>	P308 + P313 - IF exposed or concerned: Get medical advice/attention. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P321 - Specific treatment (see this label). P332 + P313 - If skin irritation occurs: Get medical advice/attention. P362 - Take off contaminated clothing and wash before reuse. P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P391 - Collect spillage.
<b>Storage</b>	P405 - Store locked up. P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
<b>Disposal</b>	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Not classified.

### 3. Composition/information on ingredients

#### Mixtures

Hazardous components Chemical name	CAS number	%
2-Methylpentane	107-83-5	30 - < 40
2,3-Dimethylbutane	79-29-8	10 - < 20
3-Methylpentane	96-14-0	10 - < 20
Propane	74-98-6	10 - < 20
2,2-Dimethylbutane	75-83-2	5 - < 10
N-Butane	106-97-8	5 - < 10
Isobutane	75-28-5	1 - < 3
N-hexane	110-54-3	1 - < 3
Other components below reportable levels		10 - < 20

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Behavioral changes. Narcosis. Decrease in motor functions. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Symptoms may be delayed. Keep victim under observation.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water. Foam. Carbon dioxide (CO <sub>2</sub> ). Powder.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Fire may produce irritating, corrosive and/or toxic gases.

<b>Special protective equipment and precautions for firefighters</b>	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.
<b>Fire-fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. Use water spray to cool unopened containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	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. Cool containers exposed to flames with water until well after the fire is out.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	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 out of low areas. Ventilate closed spaces before entering them.
<b>Methods and materials for containment and cleaning up</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. 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.
<b>Environmental precautions</b>	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Pressurized container: Do not pierce or burn, even after use. Vapors may form explosive mixtures with air. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Ground and bond containers when transferring material. Do not use if spray button is missing or defective. Do not re-use empty containers. 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.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 3 Aerosol.  Store locked up. Contents under pressure. The pressure in sealed containers can increase under the influence of heat. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other 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. Avoid exposure to long periods of sunlight. Store in a well-ventilated place. 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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
N-hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
2,2-Dimethylbutane (CAS 75-83-2)	STEL	1000 ppm
2,3-Dimethylbutane (CAS 79-29-8)	TWA	500 ppm
	STEL	1000 ppm
2-Methylpentane (CAS 107-83-5)	TWA	500 ppm
	STEL	1000 ppm
3-Methylpentane (CAS 96-14-0)	TWA	500 ppm
	STEL	1000 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
	TWA	500 ppm
Isobutane (CAS 75-28-5)	TWA	1000 ppm
N-Butane (CAS 106-97-8)	TWA	1000 ppm
N-hexane (CAS 110-54-3)	TWA	50 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
2,2-Dimethylbutane (CAS 75-83-2)	Ceiling	1800 mg/m3
		510 ppm
	REL	350 mg/m3 100 ppm
2,3-Dimethylbutane (CAS 79-29-8)	Ceiling	1800 mg/m3
		510 ppm
	REL	350 mg/m3 100 ppm
2-Methylpentane (CAS 107-83-5)	Ceiling	1800 mg/m3
		510 ppm
	REL	350 mg/m3 100 ppm
3-Methylpentane (CAS 96-14-0)	Ceiling	1800 mg/m3
		510 ppm
	REL	350 mg/m3 100 ppm
Isobutane (CAS 75-28-5)	REL	1900 mg/m3 800 ppm
N-Butane (CAS 106-97-8)	REL	1900 mg/m3 800 ppm
N-hexane (CAS 110-54-3)	REL	180 mg/m3 50 ppm
Propane (CAS 74-98-6)	REL	1800 mg/m3 1000 ppm

**Biological limit values**

**US. ACGIH. BEIs. Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
N-hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedion without hydrolysis	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines**

**US. ACGIH Threshold Limit Values**

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

**US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants**

N-HEXANE (CAS 110-54-3) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Chemical resistant gloves are recommended.
<b>Other</b>	Normal work clothing (long sleeved shirts and long pants) is recommended. Chemical resistant gloves.
<b>Respiratory protection</b>	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
<b>Thermal hazards</b>	Not available.

General hygiene considerations

When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Appearance	Liquid.
Physical state	Gas.
Form	Aerosol.
Color	ClearColorless
Odor	Ether-like.
Odor threshold	Not available.
pH	Not available.
Initial boiling point and boiling range	141.8 °F (61 °C)
Flash point	12.20 °F (-11.00 °C) Tag Closed Cup
Evaporation rate	< 1 BuAc
Flammability (solid, gas)	Flammable gas.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.6 % estimated
Flammability limit - upper (%)	7 % estimated
Vapor pressure	352 mm Hg @ 38 °C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	0 % in water
Partition coefficient (n-octanol/water)	3.2
Auto-ignition temperature	788 °F (420 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Heat of combustion	> 30 kJ/g
Specific gravity	0.67 - 0.69 @ 20 °C
VOC (Weight %)	90 % per U.S. State and Federal Consumer Product Regulations

## 10. Stability and reactivity

Reactivity	Strong oxidizing agents.
Chemical stability	Risk of explosion.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong oxidizing agents. Fluorine. Chlorine. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

Ingestion	May be harmful if swallowed. May be fatal if swallowed and enters airways.
Inhalation	May be harmful if inhaled. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Skin contact	Causes skin irritation.
Eye contact	May be irritating to eyes.
Symptoms related to the physical, chemical and toxicological characteristics	Irritant effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Behavioral changes. Decrease in motor functions. Narcosis.

### Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
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Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	May be irritating to eyes.
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure. Central nervous system. Liver. Kidneys. Blood. Skin.
Aspiration hazard	May be harmful if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.
Further information	Symptoms may be delayed.

## 12. Ecological information

Ecotoxicity	Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the environment.
Persistence and degradability	Not inherently biodegradable.
Bioaccumulative potential	Not available.
Partition coefficient n-octanol / water (log Kow)	
LPS® Belt Dressing	3.2
Propane	2.36
Isobutane	2.76
N-Butane	2.89
2,3-Dimethylbutane	3.42
3-Methylpentane	3.6
2-Methylpentane	3.74
2,2-Dimethylbutane	3.82
N-hexane	3.9
Mobility in soil	Not available.
Other adverse effects	Not available.

## 13. Disposal considerations

Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Local disposal regulations	Not available.
Hazardous waste code	D003: Waste Reactive material D001: Waste Flammable material with a flash point <140 F
Waste from residues / unused products	Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.
Contaminated packaging	Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Subsidiary class(es)	Not available.
Packing group	Not available.
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Labels required	2.1
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

### IATA

UN number	UN1950
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UN proper shipping name Aerosols, flammable  
Transport hazard class(es) 2.1  
Subsidiary class(es) -  
Packaging group Not available.  
Environmental hazards NO  
Labels required 2.1  
ERG Code Not available.  
Special precautions for user Not available.

**IMDG**

UN number UN1950  
UN proper shipping name Aerosols, flammable  
Transport hazard class(es) 2.1  
Subsidiary class(es) -  
Packaging group Not available.  
Environmental hazards  
Marine pollutant NO  
Labels required 2.1  
EmS Not available.  
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

**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.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
Not on regulatory list.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

2,2-Dimethylbutane (CAS 75-83-2)	LISTED
2,3-Dimethylbutane (CAS 79-29-8)	LISTED
2-Methylpentane (CAS 107-83-5)	LISTED
3-Methylpentane (CAS 96-14-0)	LISTED
Isobutane (CAS 75-28-5)	LISTED
N-Butane (CAS 106-97-8)	LISTED
N-hexane (CAS 110-54-3)	LISTED
Propane (CAS 74-98-6)	LISTED





Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

### 16. Other information, including date of preparation or last revision

<b>Issue date</b>	02-04-2013
<b>Version #</b>	01
<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.
<b>Disclaimer</b>	The information in the sheet was written based on the best knowledge and experience currently available.
<b>Revision Information</b>	Product and Company Identification: Product Uses Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Transport Information: Proper Shipping Name/Packing Group Regulatory Information: United States GHS: Classification