HEAVY-DUTY SILICONE LUBRICANT

Heavy-Duty Silicone Lubricant is a unique water-based formulation that contains a high percentage (5%) of silicone for better and longer lubrication.

NSF H1 · NO CHLOR SOLV · OTC · CARB · LO ODOR

FEATURES

- Water-based, silicone rich formula that lubricates and protects rubber, plastic and metal parts
- Does not contain chlorinated solvents
- Provides excellent lubricity
- Ideal for surfaces like elastomers and plastics where petroleum based lubricants are unsuitable
- Eliminates sticking, binding, squeaking
- Forms a clear, dry film upon extended drying
- Colorless, odorless and non-toxic
- Safe on most surfaces

SPECIFICATIONS AND APPROVALS

- Meets FDA Regulation 21 C.F.R. 178.3570 for incidental food contact
- NSF® Certified: H1 Registration # 059820 (Aerosol), # 059821 (bulk)
- Acceptable for use in Canadian food processing establishments
- Central Power & Light
- City Public Services
- Ford Motor Company
- General Motors Co.
- Kimberly-Clark
- Kodak
- New York City Transit
- CARB Compliant
- OTC Compliant

APPLICATIONS

- Castors
- Guards
- Guide Rails
- Moving Plastic Parts
- Plastic Gears
- Rings
- Rubber Bushings
- Rubber Mountings
- Seals
- Window Channels

PACKAGE SIZES

Net Contents	Part No.
13 wt. oz. / 369 g / 439 mL aerosol	01516
5 gal. (18.93) pail	01505

HEAVY-DUTY SILICONE LUBRICANT

PROPERTIES

Appearance/Physical State	Liquid	Color	Colorless/water white
Odor	Mild	Flash Point °F (°C)	144 °F (62 °C) TCC
Specific Gravity (water=1)	0.92 – 0.94 @ 68°F (20°C)	VOC Content	31.9% (aerosol); 20.0% (bulk) per State & Federal Consumer Product Regulations 296 g/L (aerosol); 185 g/L (bulk) per SCAQMD Rule 102
Auto Ignition Temperature	>572°F (300°C)		
Evaporation Rate	<1 BuAc		
HMIS	1, 2, 0	Vapor Pressure	17.5 mmHg @ 68°F (20°C)
Propellant	Propane/Isobutane blend	Temperature Range °F(°C)	-40°F (-40°C)to 392°F (200°C)

DIRECTIONS

AEROSOL: Shake well before using. Apply on clean surface. Hold can 10-12 inches away from surface and spray evenly. Wipe off excess. Reapply as needed.

BULK: KEEP FROM FREEZING. Mix well before using. Apply evenly to clean surface. Wipe off excess. Reapply as needed.

STORAGE

Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store below 120°F. Store aerosols as Level 1 Aerosol (NFPA 30B). Store all materials in dry, well-ventilated area. Avoid breathing vapors.

DISPOSAL INFORMATION

Waste must be disposed of in accordance with national, regional, provincial, and local environmental control regulations.

MATERIAL SAFETY DATA SHEETS AVAILABLE UPON REQUEST OR VISIT OUR WEB SITE : WWW.LPSLABS.COM

LPS® Laboratories • *An Illinois Tool Works Company*
4647 Hugh Howell Road • Tucker, GA 30084 • TEL: (800) 241-8334 or (770) 243-8800 • FAX: (800) 543-1563 or (770) 243-8899
Internet Web Site: www.lpslabs.com

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	LPS® Heavy-Duty Silicone (Aerosol)
Registration number	-
Synonyms	None.
Part Number	M01516
Issue date	06-March-2013
Version number	01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	An industrial lubricant designed to reduce mechanical wear and to extend equipment life of machinery where rubber and plastics are involved and where silicone can be tolerated.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier	Geocel Limited
Company name	Western Wood Way, Langage Science Park, Plympton,
Address	Plymouth, PL7 5BG United Kingdom
Telephone	+44 (0)1752 202060 / +44 (0)1752 334384
In Case of Emergency	+001 703-527-3887
Manufacturer	
Company name	LPS Laboratories, a division of Illinois Tool Works, Inc.
Address	4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)
Website	http://www.lpslabs.com
e-mail	sds@lpslabs.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification	R10

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Flammable aerosols	Category 2	H223 - Flammable aerosol.

Hazard summary

Physical hazards	Flammable.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Flammable.
Main symptoms	Irritating to eyes, respiratory system and skin. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Prolonged exposure may cause chronic effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms

Signal word Warning

Hazard statements

H223 Flammable aerosol.

Precautionary statements

Prevention

P210 Keep away from flames and hot surfaces-No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurised container: Do not pierce or burn, even after use.

Response Not applicable.

Storage

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information Not applicable.

2.3. Other hazards Not assigned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

The components are not hazardous or are below required disclosure limits.

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible).

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician if symptoms develop or persist.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Eye contact Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

Ingestion In the unlikely event of swallowing contact a physician or poison control centre. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Irritant effects. Defatting of the skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Shortness of breath. Discomfort in the chest.

4.3. Indication of any immediate medical attention and special treatment needed In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Carbon dioxide (CO2). Alcohol resistant foam. Powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Contents under pressure. Pressurised container may explode when exposed to heat or flame.

5.3. Advice for firefighters

Special protective equipment 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.

Special fire fighting procedures Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Keep people away from and upwind of spill/leak.
For emergency responders	Keep unnecessary personnel away.
6.2. Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Extinguish all flames in the vicinity. 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. Following product recovery, flush area with water. 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.
6.4. Reference to other sections	Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. Avoid prolonged or repeated contact with skin. Wear protective gloves/eye protection/face protection. Wash thoroughly after handling. Use care in handling/storage.
7.2. Conditions for safe storage, including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep out of the reach of children.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Finland. Workplace Exposure Limits

Components	Type	Value
Naphtha, Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	TWA	500 mg/m3

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
Naphtha, Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	TWA	300 mg/m3
		50 ppm

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
Naphtha, Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	STEL	900 mg/m3
	TWA	300 mg/m3

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
Naphtha, Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	STEL	600 mg/m3
		100 ppm
	TWA	300 mg/m3
		50 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure controls

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

Eye/face protection	Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.
Skin protection	
- Hand protection	Use personal protective equipment as required. Chemical resistant gloves are recommended.
- Other	Do not get this material in contact with skin. Chemical resistant gloves.
Respiratory protection	Do not breathe dust/fume/gas/mist/vapors/spray. No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Not available.
Hygiene measures	Do not get in eyes, on skin, on clothing. When using, do not eat, drink or smoke. Wash hands after handling. Handle in accordance with good industrial hygiene and safety practices.
Environmental exposure controls	Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Physical state	Gas.
Form	Aerosol
Colour	White
Odour	Mild.
Odour threshold	Not established
pH	Not applicable.
Initial boiling point and boiling range	100 °C (212 °F)
Flash point	62,00 °C (143,60 °F) Tag closed cup
Evaporation rate	< 1 BuAc
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	1,3 %
Flammability limit - upper (%)	9,5
Vapour pressure	17,5 mm Hg @ 20ºC
Vapour density	6
Relative density	Not available.
Solubility(ies)	Emulsifies
Partition coefficient (n-octanol/water)	< 1
Auto-ignition temperature	> 300 °C (> 572 °F)
Decomposition temperature	Not available.
Viscosity	5000 - 12000 cP @ 25ºC
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

Heat of combustion	< 20 kJ/g
Percent volatile	Not established

Specific gravity	0,92 - 0,94
VOC (Weight %)	31,9 % per U.S. State and Federal Consumer Product Regulations.

SECTION 10: Stability and reactivity

10.1. Reactivity	Strong oxidizing agents.
10.2. Chemical stability	Risk of ignition.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. This product may react with oxidizing agents.
10.5. Incompatible materials	Incompatible with oxidizing agents.
10.6. Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

General information	Not available.

Information on likely routes of exposure

Ingestion	May be harmful if swallowed.
Inhalation	Vapours 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	Not available.

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Note P - "The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)." No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Note P - "The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)." Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	Not available.
Other information	Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity	Not expected to be harmful to aquatic organisms.
12.2. Persistence and degradability	Expected to biodegrade.
12.3. Bioaccumulative potential	Not available.

Partition coefficient n-octanol/water (log Kow)

LPS® Heavy-Duty Silicone (Aerosol)	< 1

Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging 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.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Contents under pressure. Do not puncture, incinerate or crush. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14: Transport information

ADR

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	2.1
Subsidiary class(es)	-
14.4. Packing group	Not available.
14.5. Environmental hazards	No
Tunnel restriction code	Not available.
Labels required	2.1
14.6. Special precautions for user	Not available.

RID

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	2.1
Subsidiary class(es)	-
14.4. Packing group	Not available.
14.5. Environmental hazards	No
Labels required	2.1
14.6. Special precautions for user	Not available.

ADN

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	2.1
Subsidiary class(es)	-
14.4. Packing group	Not available.
14.5. Environmental hazards	No
Labels required	2.1
14.6. Special precautions for user	Not available.

IATA

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	2.1
Subsidiary class(es)	-
14.4. Packing group	Not available.
14.5. Environmental hazards	Not available.
Labels required	2.1
ERG Code	Not available.
14.6. Special precautions for user	Not available.

IMDG

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	2.1
Subsidiary class(es)	-
14.4. Packing group	Not available.
14.5. Environmental hazards	
Marine pollutant	No
Labels required	2.1
14.6. Special precautions for user	Not available.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This substance/mixture is not intended to be transported in bulk.

ADN; ADR; IATA; IMDG; RID

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not regulated.

Directive 94/33/EC on the protection of young people at work

Not regulated.

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations	Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	R10 Flammable.
Revision information	None.
Training information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.