



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	LPS® ThermaPlex® Bio Green™ Bearing Grease
Version #	03
Issue date	06-19-2012
Revision date	09-12-2012
Supersedes date	06-21-2012
CAS #	Mixture
Part Number	70706, 70714
Product use	A lubricating grease intended for bearings offering an environmentally friendly alternative to traditional greases in applications where contamination of the environment is a concern.
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	WARNING May cause skin irritation.
OSHA regulatory status	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Potential health effects	
Routes of exposure	Skin contact. Inhalation.
Eyes	Irritating to eyes.
Skin	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May cause irritation.
Signs and symptoms	Irritating to eyes, respiratory system and skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Vegetable Oil	Mixture	80 - 90
Proprietary Additives	Mixture	20 - 40

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms occur.
Skin contact	Wash off with warm water and soap.
Inhalation	Move to fresh air. If breathing stops, provide artificial respiration. Call a physician if symptoms develop or persist.
Ingestion	Do not induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media Water Spray or Fog. Dry chemical powder. Foam. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Fire fighting

equipment/instructions

In case of fire: Evacuate area. Prevent fire extinguishing water from contaminating surface water or the ground water system. Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

Aldehydes, incomplete combustion products, smoke, fume, sulfur oxides, oxides of carbon

6. Accidental Release Measures

Environmental precautions

No special environmental precautions required.

Methods for containment

Stop the flow of material, if this is without risk.

Methods for cleaning up

Soak up with inert absorbent material. Sweep up or vacuum up spillage and collect in suitable container for disposal. The product is immiscible with water and will spread on the water surface. Remove from the surface by skimming or with suitable absorbents.

7. Handling and Storage

Handling

Avoid contact with skin. Wash hands thoroughly after handling.

Storage

Keep tightly closed in a dry, cool and well-ventilated place. To maintain product quality, do not store in heat or direct sunlight.

8. Exposure Controls / Personal Protection

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.

Personal protective equipment

Eye / face protection

Chemical goggles are recommended. Eye wash fountain is recommended.

Skin protection

Not normally needed. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

No personal respiratory protective equipment normally required. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance

Grease

Physical state

Solid.

Form

Not available.

Color

Beige.

Odor

Slight petroleum odor

Odor threshold

Not available.

pH

Not available.

Vapor pressure

< 1 mm Hg

Vapor density

< 1

Boiling point

Not available.

Melting point/Freezing point

Not available.

Solubility (water)

Slight

Specific gravity

0.92

Relative density

Not available.

Flash point

473.00 °F (245.00 °C) Cleveland Open Cup

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
VOC	0
Other data	
Flammability class	Combustible IIIB estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials	Not available.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Local effects	May irritate eyes and skin.
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12. Ecological Information

Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	Not available.
Mobility in environmental media	The product is immiscible with water and will sediment in water systems.

13. Disposal Considerations

Disposal instructions	Incinerate the material under controlled conditions in an approved incinerator. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
Contaminated packaging	Do not re-use empty containers.

14. Transport Information

General	This material is not regulated by any mode of transportation.
DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

DEA Essential Chemical Code Number

Not regulated.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

State regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other Information

HMIS® ratings Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings Health: 0
Flammability: 1
Instability: 0

This data sheet contains changes from the previous version in section(s): Physical & Chemical Properties: Color