



Material Safety Data Sheet

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Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name JET-LUBE® WHITE LITHIUM GREASE w/ PTFE

Product Code(s) 503

Recommended Use Lubricants, Greases and Release Products, Sealant

Synonyms WHITE LITHIUM GREASE w/ PTFE.

Manufacturer Address

Jet-Lube, Inc.
 4849 Homestead Rd.
 Suite 232
 Houston, Texas 77028
 TEL: 713-670-5700

Emergency Telephone Number 713-670-5700

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance Off-white **Physical State** Semi-fluid (gel). **Odor** Petroleum Oil-Pungent

Potential Health Effects

Acute Toxicity

Eyes No hazard from product as supplied.

Skin No known hazard in contact with skin.

Inhalation No known hazard by inhalation.

Ingestion Not an expected route of exposure.

Chronic Effects This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product.

Aggravated Medical Conditions Respiratory disorders. Lungs.

Environmental Hazard Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Zinc oxide	1314-13-2	3-7
Titanium dioxide	13463-67-7	1-5

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable.			
Flash Point	> 221 °C			
Suitable Extinguishing Media	Dry powder. Carbon dioxide (CO ₂). Foam. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Unsuitable Extinguishing Media	Do not scatter spilled material with high pressure water streams.			
Explosion Data				
Sensitivity to Mechanical Impact	None.			
Sensitivity to Static Discharge	None			
Specific Hazards Arising from the Chemical	Burning produces obnoxious and toxic fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Heavy metal compounds. Halogenated compounds			
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
NFPA	Health Hazard 1	Flammability 1	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal Protection X

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Take up mechanically and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Ensure adequate ventilation.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep in a banded area

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc oxide 1314-13-2	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection

Safety glasses with side-shields.

Skin and Body Protection

Long sleeved clothing. Protective gloves.

Respiratory Protection

None required under normal usage. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off-white.	Odor	Petroleum Oil-Pungent.
Odor Threshold	No information available.	Physical State	Semi-fluid (gel)
pH	Neutral	Autoignition Temperature	No information available.
Flash Point	> 221 °C	Boiling Point/Boiling Range	> 316 °C / 600.8 °F
Decomposition Temperature	No information available.	Flammability Limits in Air	No information available.
Melting Point/Range	190 °C / 374 °F		
Specific Gravity	0.96	Water Solubility	Insoluble in water.
Solubility	Largely	Evaporation Rate	No information available.
Vapor Pressure	No data available.	Vapor Density	No data available.
VOC Content (%)	0.3		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible Products	Strong oxidizing agents.
Conditions to Avoid	None known based on information supplied.
Hazardous Decomposition Products	None known based on information supplied.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	None known.
Eye Contact	None known.
Skin Contact	None known.
Ingestion	Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc oxide	> 5000 mg/kg (Rat)		
Titanium dioxide	> 10000 mg/kg (Rat)		> 6820 mg/m ³

Chronic Toxicity

Chronic Toxicity This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Sensitization	None known.
Mutagenic Effects	None known.
Reproductive Toxicity	None known.
Developmental Toxicity	None known.
Target Organ Effects	Lungs. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Zinc oxide	Selenastrum capricornutum 72-hour EC50: 0.14 mg/l	Oncorhynchus mykiss 96-hour LC50: 0.14 mg/l		Daphnia magna 48-hour EC50: 0.07 mg/l

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated Packaging Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Zinc oxide	Toxic

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
EINECS	Complies
ENCS	Not determined
IECSC	Complies
KECL	Not determined
PICCS	Complies
AICS	Not determined

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Zinc oxide	1314-13-2	5-10	1.0
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc oxide		X		
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts		X		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Zinc oxide	X	X	X		
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	X		X		
Titanium dioxide	X	X	X	-	X

International Regulations

Mexico - Grade

Slight risk, Grade 1

Chemical Name	Carcinogen Status	Exposure Limits
Zinc oxide		Mexico: TWA 5 mg/m ³ Mexico: TWA 10 mg/m ³ Mexico: STEL 10 mg/m ³
Titanium dioxide		Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet