SECTION 1 -- IDENTIFICATION

Trade Name: Gearlube Tube **Product No.:** 12M110
Supplier's Name : Metalink Polymers and Adhesives **Emergency Phone:** 1-800-721-2448
Address: P.O. Box 209, Buna, TX 77612

SECTION 2 -- COMPOSITION / INFORMATION ON INGREDIENTS

Zinc
- CAS # 7440-66-6
- RTECS #:ZG8600000
- = Weight : .23
- EPA Report Quantity: 1000 lbs
- DOT Report Quantity: 1000 lbs

12-Hydroxystearic Acid Lithium Salt (Lithium Soap Thickener)
- CAS # 7620-77-1
- + Weight : 1.57

Chlorine
- CAS # 7782-50-5
- RTECS # : F02100000
- = Weight : .63
- OSHA PEL: C3 MG/M3; C1 PPM
- ACGIH TLV: 1.5 MG/M3; 0.5 PPM
- ACGIH STEL: 2.9 MG/MC; 1 PPM
- EPA Report Quantity: 10 lbs
- DOT Report Quantity: 10 lbs

Chloro Alkanes
- CAS # 61788-76-9
- = Weight : 1.43

Phosphorodithioic Acid, O, O-DI-C1-14-Alkyl Esters, Zinc Salts;
(Phosphorodithoic Acid, O, O-DI-C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP))
- CAS # 68649-42-3
- = Weight : 1.51

Fatty Acids , C16-22, Lithium Salts
- CAS # 68783-36-8
- = Weight : .4

Resin and Rosin Acids Polymo, Zinc Salts
- CAS # 70248-43-0
- = Weight : 1.01

Non-Hazardous Petroleum Lubricating Oil
- Fraction by Weight: Balance

SECTION 3 HAZARD IDENTIFICATION

Routes of Entry: Inhalation - Yes Skin - Yes Ingestion - Yes
Reports of Carcinogenicity: NTP - No IARC - No OSHA - No

Health Hazards - Acute and Chronic:	
Eye contact	Possible irritation
Skin contact	Possible irritation
Inhalation	Speech, sleepiness, vertigo, thirsty, burning of nose and mouth, choking, coughing, vomiting, headaches, dizziness and stomach irritation
Ingestion	Possible irritation to GI tract
Components:	
Zinc	Hazard by inhalation, skin and eye contact in form of exposure to zinc oxide fume formed by oxidation of vaporized zinc. Inhalation may cause metal fume fever. Skin and eye contact may cause irritation. Pure Zinc dust is relatively non-toxic.
Target organs	Respiratory system, skin, eyes
Lithium Soap Thickener	Hazard by inhalation, skin and eye contact. Inhalation may cause irritation to respiratory system, nausea, tremors (effects of overexposure).

Effects of overexposure:	
Health hazards	Slurred speech, sleepiness, vertigo and thirst. Skin and eye contact may cause irritation.
	Target organs: Respiratory system, cns, skin and eyes.
Chlorine	Hazard by inhalation, skin and eye contact, inhalation may cause burning of nose and mouth, choking, coughing, nausea, vomiting, headaches, dizziness, syncope, pulmonary edema, pneumonia and hypoxemia. Skin and eye contact may cause irritation.
	Target organs: Respiratory system, skin and eyes.
Chloro Alkanes	Hazard by inhalation, skin and eye contact. Inhalation may cause irritation to respiratory system, nausea, sleepiness and headaches. Skin and eye contact may cause irritation.
	Target organs: Respiratory system, cns, skin and eyes.
Phosphorodithoic Acid, O, O-DI, C1-14-Alkyl EST ERS, Zinc (Supdat)	Medical condition aggravated by exposure. Consult a physician.

SECTION 4 -- FIRST AID MEASURES

Eye contact: Flush eyes with water for at least 15-20 minutes while holding eyelid open. If irritation persists, consult a physician. **Skin Contact:** Wash with soap and water to remove material. **Inhalation:** Expose to fresh air. **Ingestion:** Consult a physician.

SECTION 5 -- FIRE FIGHTING MEASURES

Flash Point Method: PMCC	204.4º C, 400º F
Extinguishing Media	Carbon dioxide, foam, dry chemical and water fog
Fire Fighting Procedures	Use NIOSH approved SCBA and full protective equipment. Water or foam may cause frothing.
Unusual Fire/Explosion Hazard	Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply. Zinc dust may form explosive mixture with air; damp dust may ignite spontaneously and ignite on exposure to air.

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

Spill release procedures: Solid under 38º C. If liquid, wash with synthetic detergent and hot water. If solid, scrape up and discard.

SECTION 7 -- HANDLING AND STORAGE

Handle as a typical grease.

SECTION 8 -- EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protective Equipment:	
Respiratory Protection	Use NIOSH approved respiratory appropriate for exposure of concern
Ventilation	Not needed
Gloves	Impervious gloves
Eye Protection	ANSI approved chemical workers goggles
Other Protective Equipment	Eye wash and deluge shower meeting ANSI design criteria. Clothing/equipment: N/A
Supplemental Safety and Health	**- Health Hazards:**
Salts (2:1) (ZDDP)	Hazard by inhalation, ingestion, skin and eye contact. Inhalation may cause irritation and hemorrhages in stomach. Ingestion may cause irritation to GI tract. Skin and eye contact may cause irritation. *Target Organs*: GI tract, skin and eyes
Fatty Acids, C-16-22, Lithium Salts	Hazard by inhalation, skin and eye contact, inhalation may cause respiratory irritation

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

Vapor pressure:	< 0.1 MMHG @ 20C
Solubility in water:	Insoluble
Appearance and Odor:	Brown grease and mild odor

SECTION 10 -- STABILITY AND REACTIVITY

Stability indicator/materials to avoid: Yes, contact of zinc with acids and alkali hydroxides results in evolution of hydrogen. Chlorine is incompatible with acetylene, ether, turpentine, ammonia, fuel gas, hydrogen and finely divided metals. Lithium soap thickener, cloro alkanes. **Hazardous decomposition products:** Carbon monoxide, metal oxides and elemental oxides. Hazardous

decomposition products of lithium soap thickener are carbon dioxide and carbon monoxide. Hazardous decomposition production of chlorine is hydrochloric acid (toxicological information).

SECTION 11 -- TOXICOLOGICAL INFORMATION

Hazardous decomposition products of chloro alkanes are hydrochloric acid, carbon dioxide and carbon monoxide. Hazardous decomposition products of phosphorodithoic acid, O, O-DI, C-1-14-Alkyl Esters, Zinc salts (s:1) (ZDDP) are phosphorus oxides. Hazardous deposition products of fatty acids, C-16-22, lithium salts are carbon dioxide and carbon monoxide.

SECTION 12 -- DISPOSAL CONSIDERATION

Waste disposal methods: Empty product containers, product waste and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION 13 -- REGULATORY INFORMATION

SARA Title III Information: Zinc and chlorine are toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and Supplier Notification Requirements (40 CFR Part 372).

Federal Regulatory Information: Chlorine is on the list of hazardous air pollutants that are regulated under Section 112 of the EPA Clean Air Act, 1990.

SECTION 14 -- OTHER INFORMATION

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the user. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any federal, state or local laws, rules, regulations or ordinances.