MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

LUBRIPLATE® Lubricants Co.

129 Lockwood St. Newark, NJ 07105 Emergency Telephone Number: 1-800-255-3924-CHEM-TEL (24 hour) Telephone Number for information:

1-973-589-9150

SUBSTANCE: LUBRIPLATE X-357

TRADE NAMES/SYNONYMS:

PRODUCT USE: Petroleum lubricating grease

CREATION DATE: 04/12/2007 **REVISION DATE:** 03/20/2012

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Light hydrotreated naphthenic distillates (petroleum)

CAS NUMBER: 64742-53-6

EC NUMBER (EINECS): 265-156-6

PERCENTAGE: 45-50

COMPONENT: Heavy hydrotreated naphthenic distillates (petroleum)

CAS NUMBER: 64742-52-5

EC NUMBER (EINECS): 265-155-0

PERCENTAGE: 25-30

COMPONENT: Zinc oxide **CAS NUMBER:** 1314-13-2

EC NUMBER (EINECS): 215-222-5

PERCENTAGE: 5-10

COMPONENT: 12 hydroxystearic acid

CAS NUMBER: 106-14-9

EC NUMBER (EINECS): 203-366-1

PERCENTAGE: 0-5

COMPONENT: Antimony 0,0-dipropylphosphorodithionate

CAS NUMBER: 15874-48-3

EC NUMBER (EINECS): 240-001-5

PERCENTAGE: 0-5

COMPONENT: Carbon black **CAS NUMBER:** 1333-86-4

EC NUMBER (EINECS): 215-609-9

PERCENTAGE: 0-5

COMPONENT: Inedible animal grease

CAS NUMBER: 68153-81-1

EC NUMBER (EINECS): 268-896-8

PERCENTAGE: 0-2

COMPONENT: Lithium hydroxide monohydrate

CAS NUMBER: 1310-66-3

EC NUMBER (EINECS): not assigned

PERCENTAGE: 0-1

COMPONENT: Butyl zimate **CAS NUMBER:** 136-23-2

EC NUMBER (EINECS): 205-232-8

PERCENTAGE: 0-1

COMPONENT: Molybdenum disulfide

CAS NUMBER: 1317-33-5

EC NUMBER (EINECS): 215-263-9

PERCENTAGE: 0-5

COMPONENT: Petroleum hydrocarbon

CAS NUMBER: 64742-58-1

EC NUMBER (EINECS): 265-161-3

PERCENTAGE: 0-1

COMPONENT: Hydroxyalkyl carboxylic ester

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-1

COMPONENT: Alkyl thiadiazole mixture

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-1

NOTE: The IP 346 value of the mineral oil is less than 3%

SECTION 3 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: Irritation **LONG TERM EXPOSURE:** Lung damage

SKIN CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: Irritation, skin disorders

EYE CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: No information available

INGESTION:

SHORT TERM EXPOSURE: Diarrhea, difficulty breathing

LONG TERM EXPOSURE: no information on significant adverse effects

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

Health – 1 Flammability – 1 Reactivity – 0

Not a Controlled Product under (WHMIS) - Canada

Special Protection: See Section 8

SECTION 4 FIRST AID MEASURES

INHALATION: Vapor pressure is very low and inhalation at room temperature is not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician.

SKIN CONTACT: Remove any contaminated clothing and wash with soap and warm water. If injected by high pressure under skin, regardless of the appearance or its size, contact a physician IMMEDIATELY. Delay may cause loss of affected part of the body.

EYE CONTACT: Flush with clear water for 15 minutes or until irritation subsides. If irritation persists, consult a physician.

INGESTION: If ingested, call a physician immediately. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard

EXTINGUISHING MEDIA: Foam, Dry Chemical, Carbon Dioxide or Water Spray (Fog)

SPECIAL FIRE FIGHTING PROCEDURES: Cool exposed containers with water. Use air-supplied breathing equipment for enclosed or confined spaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not store or mix with strong oxidants. Empty containers retain residue. Do not cut, drill, grind, or weld, as they may explode.

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Scrape up grease, wash remainder with suitable petroleum solvent or add absorbent. Keep petroleum products out of sewers and water courses. Advise authorities if product has entered or may enter sewers and water courses.

SECTION 7 HANDLING AND STORAGE

STORAGE: Keep containers closed when not in use. Do not handle or store near heat, sparks, flame, or strong oxidants.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

OIL MIST IN AIR (Not Encountered in Normal Usage):

5 mg/m³ UK OES TWA 10mg/m³ UK OES STEL

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant (nitrile) gloves.

RESPIRATOR: Consider the need for appropriate protective equipment, such as self-contained breathing apparatus, adequate masks and filters.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid APPEARANCE: smooth COLOUR: slate black PHYSICAL FORM: grease ODOR: mineral oil odor BOILING POINT: >288°C

FREEZING POINT: Not available **FLASH POINT:** 160°C (COC)

LOWER FLAMMABLE LIMIT: 0.9% by volume **UPPER FLAMMABLE LIMIT:** 7.0% by volume

AUTO IGNITION: not available **VAPOUR PRESSURE:** <0.01 **VAPOR DENSITY (air=1):** >5

SPECIFIC GRAVITY (water=1): 0.97

DENSITY: not available

WATER SOLUBILITY: negligible

pH: not available

VOLATILITY: not available

ODOR THRESHOLD: not available

EVAPORATION RATE (Butyl acetate = 1): <0.01

VISCOSITY: not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressures

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with

incompatible materials.

INCOMPATIBLES: Oxidising materials, chlorine

HAZARDOUS DECOMPOSITION:

Thermal decomposition products or combustion: oxides of carbon, oxides of sulphur

POLYMERISATION: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Light hydrotreated naphthenic distillates (petroleum):

TOXICITY DATA:

Low order of dermal and oral toxicity

Heavy hydrotreated naphthenic distillates (petroleum):

TOXICITY DATA:

Low order of dermal and oral toxicity

Zinc oxide:

TOXICITY DATA:

No data available

12 hydroxystearic acid:

TOXICITY DATA:

Greater than 5 g/kg oral-rat LD50

Antimony 0,0-dipropylphosphorodithionate:

TOXICITY DATA:

4,695 mg/kg oral-rat LD50

Carbon black:

TOXICITY DATA:

Greater than 8,000 mg/kg oral-rat LD50

Inedible animal grease:

TOXICITY DATA:

No data available

Lithium hydroxide monohydrate:

TOXICITY DATA:

Greater than 8 g/kg oral-rat LD50

Molybdenum disulfide:

TOXICITY DATA:

No data available

Butyl zimate:

TOXICITY DATA:

Greater than 16,000 mg/kg oral-rat LD50

Petroleum hydrocarbon:

TOXICITY DATA:

No data available

Hydroxyalkyl carboxylic ester:

TOXICITY DATA:

Between 2,000 and 5,000 mg/kg oral-rat LD50

Alkyl thiadiazole mixture:

TOXICITY DATA:

Greater than 10,000 mg/kg oral-rat LD50

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations

SECTION 14 TRANSPORT INFORMATION

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: No classification assigned.

AIR TRANSPORT ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): N

Risk Phrases: R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SARA/TITLE III, Section 313 Status – Zinc Compounds <8%, Antimony Compounds <3%

SECTION 16 OTHER INFORMATION

The above information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of LUBRIPLATE Lubricants Company. The data on these sheets relates only to the specific material designated herein. LUBRIPLATE Lubricants Company assumes no legal responsibility for use or reliance upon this data.