MATERIAL SAFETY DATA SHEET

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

 ${\bf LUBRIPLATE @\ Lubricants\ Co.}$

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1-973-589-9150

SUBSTANCE: LUBRIPLATE ZF-46

TRADE NAMES/SYNONYMS:

PRODUCT USE: Petroleum lubricating oil

CREATION DATE: 06/12/2008 **REVISION DATE:** 03/04/2009

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Solvent dewaxed heavy paraffinic distillates

CAS NUMBER: 64742-65-0

EC NUMBER (EINECS): 265-169-7

PERCENTAGE: 95-100

COMPONENT: Methacrylate copolymer

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-2

COMPONENT: Amine mixture

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-2

COMPONENT: Kerosene **CAS NUMBER:** 8008-20-6

EC NUMBER (EINECS): 232-366-4

PERCENTAGE: 0-2

COMPONENT: Acrylate copolymer

CAS NUMBER: 26376-86-3

EC NUMBER (EINECS): not assigned

PERCENTAGE: 0-2

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 body.

EYE CONTACT: Flush eyes with clear water for 15 minutes or until irritation subsides. If irritation pesists, 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: Carbon dioxide, regular dry chemical, regular foam, water

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by products. Stay upwind and keep out of low areas.

HAZARDOUS COMBUSTION PRODUCTS:

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

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep container tightly closed. Keep away from heat, sparks, and flame. See original container for storage recommendations. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

White mineral oil:

MINERAL OIL MIST:

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: liquid APPEARANCE: transparent

COLOUR: amber

PHYSICAL FORM: oil ODOR: mineral oil odor BOILING POINT: >288 C

FREEZING POINT: Not available **FLASH POINT:** 243 C (COC)

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

AUTO IGNITION: 266 C (COC) **VAPOUR PRESSURE:** <0.01 mm Hg **VAPOR DENSITY (air=1):** >5

SPECIFIC GRAVITY (water=1): 0.931

DENSITY: not available

WATER SOLUBILITY: negligible

pH: not available

VOLATILITY: not available

ODOR THRESHOLD: not available

EVAPORATION RATE: <0.01 (Butyl acetate=1)

VISCOSITY: 6.4 mm²/s @ 100 C

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

Solvent dewaxed heavy paraffinic distillates:

TOXICITY DATA:

No data available

Methacrylate copolymer:

TOXICITY DATA:

No data available

Amine mixture:

TOXICITY DATA:

No data available

Kerosene:

TOXICITY DATA:

No data available

Acrylate copolymer: TOXICITY DATA:

Greater than 7,940 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): Not classified as dangerous.

SECTION 16 OTHER INFORMATION

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