MATERIAL SAFETY DATA SHEET

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

Manufactured for:

Crown Equipment Corporation 44 South Washington Street New Bremen, OH 45869 **Emergency Telephone Number:**

1-800-255-3924-CHEM-TEL (24 hour) Telephone Number for information:

1-973-589-9150

SUBSTANCE: Crown Heavy Duty Industrial Premium Chain and Cable Lube (AEROSOL)

TRADE NAMES/SYNONYMS:

PRODUCT USE: Petroleum lubricating oil

CREATION DATE: 02/14/2008 **REVISION DATE:** 02/14/2014

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Heavy and light hydrotreated naphthenic distillates (petroleum)

CAS NUMBER: 64742-52-5/64742-53-6

EC NUMBER (EINECS): 265-155-0/265-156-6

PERCENTAGE: 75-80

COMPONENT: Liquefied petroleum gas

CAS NUMBER: 68476-85-7

EC NUMBER (EINECS): 270-704-2

PERCENTAGE: 15-20

COMPONENT: 2-butoxyethanol

CAS NUMBER: 111-76-2

EC NUMBER (EINECS): 203-905-0

PERCENTAGE: 2-5

COMPONENT: Calcium oxidate mixture

CAS NUMBER: NA

EC NUMBER (EINECS): NA

PERCENTAGE: 0-2

COMPONENT: Mixed zinc carboxylates

CAS NUMBER: 12001-85-3

EC NUMBER (EINECS): 234-409-2

PERCENTAGE: 0-1

COMPONENT: Olefin sulfide mixture

CAS NUMBER: NA

Special Protection: See Section 8

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

Effects of Overexposure: Inhalation is the most likely method of exposure. Minimal effects are expected at levels below the TLV of components. Dizziness, drowsiness, coughing, nasal or throat irritations may occur at higher levels. Propellant may cause myocardial irritation and may act as a simple asphyxiant without other significant physiologic effects if the oxygen content is low.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

Health - 1

Flammability – 4

Reactivity – 0

WHMIS Hazard Class (Canada) – D/1/A

SECTION 4 FIRST AID MEASURES

INHALATION: Remove to fresh air. If breathing has stopped, administer artificial respiration. Get medical help immediately.

SKIN CONTACT: Remove any contaminated clothing and wash exposed area with soap and warm water.

EYE CONTACT: Flush eyes with clear water for at least 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: Carbon dioxide, regular dry chemical, regular foam

FIRE FIGHTING: Keep containers cool. Use air-supplied breathing equipment for enclosed or confined spaces. Use shielding to protect personnel against bursting containers.

UNUSUAL FIRE FIGHTING AND EXPLOSION HAZARDS: Do not spray near open flame. At elevated temperatures (over 54 C), aerosol containers may vent, burst, or rupture.

HAZARDOUS COMBUSTION PRODUCTS:

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

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Remove sources of ignition, ventilate area. Use appropriate safety equipment to enter area. Allow time for vapors to be below their TLV. Add oil absorbent and clean area. Keep petroleum products out of sewers and watercourses.

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

LIQUEFIED PETROLEUM GAS:

1,750 mg/m³ OSHA TWA 2,180 mg/m³ OSHA 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: aerosol APPEARANCE: transparent

COLOUR: off white **PHYSICAL FORM:** oil

ODOR: additive odor from aerosol can **BOILING POINT:** (Aerosol) Not applicable

FREEZING POINT: Not available

FLASH POINT: (without propellant) 154 C (COC) LOWER FLAMMABLE LIMIT: 0.9% by volume UPPER FLAMMABLE LIMIT: 9.5% by volume AUTO IGNITION: (without propellant) 177 C (COC) VAPOUR PRESSURE: Aerosol @ 54 C - 4137 mm Hg

VAPOR DENSITY (air=1): >1

SPECIFIC GRAVITY (water=1): (without propellant) 0.93

DENSITY: not available

WATER SOLUBILITY: insoluble

pH: not available

VOLATILITY: not available

ODOR THRESHOLD: not available

EVAPORATION RATE: (Butyl acetate = 1) Faster **VISCOSITY:** (without propellant) 6 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. Avoid spraying into open flame or onto red-hot surfaces.

INCOMPATIBLES: Strong oxidizers

HAZARDOUS DECOMPOSITION:

Thermal decomposition products or combustion: may form carbon monoxide, hydrogen chloride

POLYMERISATION: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Heavy and light hydrotreated naphthenic distillates:

TOXICITY DATA:

Greater than 5,000 mg/kg oral-rat LD50

Liquefied petroleum gas:

TOXICITY DATA:

No data available

2-butoxyethanol:

TOXICITY DATA:

436 mg/kg oral-rat LD50

Calcium oxidate mixture:

TOXICITY DATA:

Greater than 5,000 mg/kg oral-rat LD50

Mixed zinc carboxylates:

TOXICITY DATA:

No data available

Olefin sulfide mixture:

TOXICITY DATA:

Greater than 5,000 mg/kg oral-rat LD50

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

Do not puncture or incinerate containers. Give empty, leaking or full containers to a disposal service equipped to safely handle and dispose of pressurized containers.

SECTION 14 TRANSPORT INFORMATION

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: ID 8000, CONSUMER COMMODITY, Class 9, Packing Instructions - 910

AIR TRANSPORT ICAO: ID 8000, CONSUMER COMMODITY, Class 9, Packing Instructions - 910

MARITIME TRANSPORT IMDG: UN 1950, AEROSOLS (Ltd. Qty.), Class 2.1, EmS No. F-D, S-U, ERG No. 126

SECTION 15 REGULATORY INFORMATION

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): Not classified as dangerous.

SECTION 16 OTHER INFORMATION

Store in cool, dry area out of direct sunlight. Do not puncture or incinerate, or heat full or empty containers above 54 C.

Please read and follow directions on the product label. Keep away from children.

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