

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Pendilube (Aerosol)
Product Use: Lubricant.
Manufacturer/Supplier: Tectran Co.
2400 Anson Dr.
Mississauga, ON
L5S 1G2
Phone Number: 905-678-4974
Emergency Phone: 905-678-7200
Date of Preparation: January 15, 2012

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

FLAMMABLE. HARMFUL BY INHALATION. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. CONTENTS UNDER PRESSURE. CONTAINER MAY EXPLODE IF HEATED. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: Harmful by inhalation. May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, drying, and cracking of the skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a hazardous chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Petroleum gases, liquefied, sweetened	68476-86-8	10 - 30
Kerosine (petroleum), hydrodesulfurized	64742-81-0	3 - 7
Stoddard solvent	8052-41-3	1 - 5
zinc bis(dinonylnaphthalenesulphonate)	28016-00-4	1 - 5
Nonylphenol ethoxylate	9016-45-9	1 - 5
Naphthalenesulfonic acid, dinonyl-, calcium salt	57855-77-3	0.5 - 1.5

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon, oxides of nitrogen.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: May ignite.

Protection of Firefighters: Containers may explode when heated. Spills of this material are a slipping hazard. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Restrict access to the area. Ensure clean-up is conducted by trained personnel only. Wear adequate protective clothing and equipment. Clean-up personnel need protection against contact with skin and eyes, as well as against inhalation of dust (see Section 8). Prevent accidental contact between the spilled product and water, and avoid generating dust. Eliminate sources of ignition. Ruptured cylinders may rocket.

Environmental Precautions: Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Soak into absorbent material. Spills of this material are a slipping hazard. Thoroughly wash the area with water after a spill or leak.

Other Information: Not available.

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store in a covered, dry, climate controlled area, away from incompatibles.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Petroleum gases, liquefied, sweetened	1000 ppm	1000 ppm
Kerosine (petroleum), hydrodesulfurized	Not available.	200 mg/m ³
Stoddard solvent	100 ppm	100 ppm
zinc bis(dinonylnaphthalenesulphonate)	Not available.	Not available.
Nonylphenol ethoxylate	Not available.	Not available.
Naphthalenesulfonic acid, dinonyl-, calcium salt	Not available.	Not available.

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: A NIOSH approved particulate respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Opaque.
Color:	Blue.
Odour:	Characteristic.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	~ 100 °C (~ 212 °F)

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

Flash Point:	~ 127 °C (~ 260.6 °F)
Evaporation Rate:	< 1 (Water = 1)
Lower Flammability Limit:	1.0 (solvent component)
Upper Flammability Limit:	6.0 (solvent component)
Vapor Pressure:	8 mmHg @ 25 °C / 77 °F
Vapor Density:	> 1 (Air = 1)
Specific Gravity:	0.868 (H ₂ O=1)
Solubility in Water:	Not available.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep dry in storage. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon, oxides of nitrogen.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD ₅₀ (oral)	LC ₅₀
Petroleum gases, liquefied, sweetened	Not available.	Not available.
Kerosine (petroleum), hydrodesulfurized	> 5000 mg/kg, rat	> 5.2 mg/L 4hr, rat
Stoddard solvent	> 5000 mg/kg, rat	> 5500 mg/m ³ 4hr, rat
zinc bis(dinonylnaphthalenesulphonate)	Not available.	Not available.
Nonylphenol ethoxylate	1310 mg/kg, rat	Not available.
Naphthalenesulfonic acid, dinonyl-, calcium salt	> 5000 mg/kg, rat	> 18000 mg/m ³ , rat

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause skin irritation. Symptoms may include redness, drying, and cracking of the skin.

Ingestion: Not a normal route of exposure. Harmful: may cause lung damage if swallowed.

Inhalation: Harmful by inhalation. May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria.

Ingredient

Chemical Listed as Carcinogen or Potential Carcinogen *

Petroleum gases, liquefied, sweetened	Not listed.
Kerosine (petroleum), hydrodesulfurized	G-A3
Stoddard solvent	Not listed.
zinc bis(dinonylnaphthalenesulphonate)	Not listed.
Nonylphenol ethoxylate	Not listed.
Naphthalenesulfonic acid, dinonyl-, calcium salt	Not listed.

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Not hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material and its container must be disposed of in a safe way. Dispose according to all relevant Federal, provincial, state, and local regulations. Notify environmental authorities in the event of any reportable release of this product to the environment.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

ORM-D

TDG Classification

Limited Quantity

Section 15: REGULATORY INFORMATION

Federal Regulations

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

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Petroleum gases, liquefied, sweetened	Not listed.	Not listed.	Not listed.	Not listed.
Kerosine (petroleum), hydrodesulfurized	Not listed.	Not listed.	Not listed.	Not listed.
Stoddard solvent	Not listed.	Not listed.	Not listed.	Not listed.
zinc bis(dinonylnaphthalenesulphonate)	Not listed.	Not listed.	Not listed.	313
Nonylphenol ethoxylate	Not listed.	Not listed.	Not listed.	Not listed.
Naphthalenesulfonic acid, dinonyl-, calcium salt	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Petroleum gases, liquefied, sweetened	DSL	Yes.
Kerosine (petroleum), hydrodesulfurized	DSL	Yes.
Stoddard solvent	DSL	Yes.
zinc bis(dinonylnaphthalenesulphonate)	DSL	Yes.
Nonylphenol ethoxylate	DSL	Yes.
Naphthalenesulfonic acid, dinonyl-, calcium salt	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 1 Flammability - 3 Physical Hazard - 0 PPE - B

NFPA - National Fire Protection Association:

Health - 1 Fire - 3 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class A - Compressed Gas
- Class B5 - Flammable Aerosol
- Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



MATERIAL SAFETY DATA SHEET

Pendilube (Aerosol)

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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