Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

**Product Name**: MULTIPURPOSE LO TEMP EP GREASE  
**Synonym**: Not available  
**Code**: 650-408, MPLT  
**DSL**: See Section 15  
**TSCA**: See Section 15  
**In case of Emergency**  
Petro-Canada: 403-296-3000  
Canutec Transportation: 613-996-6666  
Poison Control Centre: Consult local telephone directory for emergency number(s).

**Manufacturer**: PETRO-CANADA  
P.O. Box 2844  
Calgary, Alberta  
T2P 3E3

**Material Uses**: This product is a multi-purpose, extreme pressure grease with outstanding shock resistant properties and is designed for use in a wide variety of severe automotive and industrial applications.

Section 2. Composition and Information on Ingredients

### Exposure Limits (ACGIH)

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% (W/W)</th>
<th>TLV-TWA (8 h)</th>
<th>STEL</th>
<th>CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Mixture of severely hydrotreated and hydrocracked base oil (petroleum) and other proprietary, non-hazardous additives.</td>
<td>Mixture</td>
<td>100</td>
<td>5 mg/m³ (oil mist)</td>
<td>10 mg/m³ (oil mist)</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

**Potential Health Effects**: Non irritating to slight transient irritation to skin and eyes, but no permanent damage. Relatively non-toxic via ingestion. This product has a low vapour pressure and is not expected to present an inhalation exposure at ambient conditions. Upon heating to high temperatures, or mechanical actions which may produce vapours or mists, inhalation of product may cause irritation of the breathing passages. For more information, refer to Section 11.

**Eye Contact**: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.

**Skin Contact**: Remove contaminated clothing - launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. High pressure grease gun is capable of injecting grease through the skin. Grease gun injuries require immediate physician assessment. Seek medical attention.

**Inhalation**: Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform artificial respiration. Allow the victim to rest in a well ventilated area. Seek medical attention.

**Ingestion**: DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.

**Note to Physician**: Not available

Section 4. First Aid Measures

**Eye Contact**  
IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.

**Skin Contact**  
Remove contaminated clothing - launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. High pressure grease gun is capable of injecting grease through the skin. Grease gun injuries require immediate physician assessment. Seek medical attention.

**Inhalation**  
Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform artificial respiration. Allow the victim to rest in a well ventilated area. Seek medical attention.

**Ingestion**  
DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.

**Note to Physician**  
Not available

Section 5. Fire-fighting Measures

**Flammability**  
May be combustible at high temperature.

**Flammable Limits**  
Not available

**Flash Points**  
Mineral Oil Blend: OPEN CUP: 202°C (395.6°F) (Cleveland)

**Auto-Ignition Temperature**  
Mineral Oil Blend: Fire Point: 180°C (356°F)

**Fire Hazards in Presence of Various Substances**  
Low fire hazard. This material must be heated before ignition will occur.

**Explosion Hazards in Presence of Various Substances**  
Do not cut, weld, heat, drill or pressurize empty container. Containers may explode in heat of fire.

**Products of Combustion**  
Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), sulphur compounds (H2S), phosphorus compounds (POx), CaOx, metallic oxides, acrolein, aldehydes, lithium compounds, smoke and irritating vapours as products of incomplete combustion.

**Fire Fighting Media and Instructions**  
NAERG96, GUIDE 171, Substances (low to moderate hazard). If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions; also, consider initial evacuation for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from area and let fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. SMALL FIRE: use DRY chemicals, foam, water spray or CO2. LARGE FIRE: use water spray, fog or foam. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. For all indoor fires and any significant outdoor fires, SCBA is required. Respiratory and eye protection are required for fire fighting personnel.

**Continued on Next Page**

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Section 6. Accidental Release Measures

Material Release or Spill

NAER96, GUIDE 171, Substances (low to moderate hazard). ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents, dry clay, or diatomaceous earth. Avoid inhaling dust of diatomaceous earth for it may contain silica in very fine particle size, making this a potential respiratory hazard. Place used absorbent in closed metal containers for later disposal or burn absorbent in a suitable combustion chamber. DO NOT FLUSH TO SEWERS, STREAMS OR OTHER BODIES OF WATER. Check with applicable jurisdiction for specific disposal requirements of spilled material and empty containers. Notify the appropriate authorities immediately.

Section 7. Handling and Storage

Handling

Keep away from sources of ignition. DO NOT reuse empty containers without commercial cleaning or reconditioning. Practice good personal hygiene. Wash hands after handling and before eating. Launder work clothes frequently. Discard saturated leather goods.

Storage

Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station.

Personal Protection - The selection of personal protective equipment varies, depending upon conditions of use.

Eyes

Eye protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use. If product is used in an application where splashing may occur, the use of safety goggles and/or a face shield should be considered.

Body

Wear appropriate clothing to prevent skin contact. As a minimum long sleeves and trousers should be worn.

Respiratory

Where concentrations in air may exceed the occupational exposure limits given in Section 2 (and those applicable to your area) and where engineering, work practices or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.

Wear appropriate chemically protective gloves. When handling hot product ensure gloves are heat resistant and insulated.

Exposure Limits

Consult local, state, provincial or territory authorities for acceptable exposure limits. This product is not expected to form a mist based on its properties and expected use.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State and Appearance</th>
<th>Viscosity</th>
<th>Colour</th>
<th>Odour</th>
<th>Odour Threshold</th>
<th>Boiling Point</th>
<th>Specific Gravity</th>
<th>Vapor Density</th>
<th>Volatility</th>
<th>Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth buttery paste.</td>
<td>Mineral Oil Blend: 11.9 cSt @ 40°C, 2.9 cSt @ 100°C, VI=108</td>
<td>Yellow</td>
<td>Mild grease like.</td>
<td>Not available</td>
<td>Not available</td>
<td>Mineral Oil Blend: 0.8291 kg/L @ 15°C (59°F).</td>
<td>Not available</td>
<td>Negligible at ambient temperature and pressure.</td>
<td>Non-volatile.</td>
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Section 10. Stability and Reactivity

Corrosivity

Not corrosive to copper or steel.

Stability

The product is stable under normal handling and storage conditions.

Incompatible Substances / Conditions to Avoid

Reactive with oxidizing agents, acids, alkalies, fluorine, hydrogen mixtures and aluminum.

Hazardous Polymerization

Will not occur under normal working conditions.

Decomposition Products

May release COx, NOx, POx, CaOx, diphenylamine, alkenes, lithium compounds, acrolein, aldehydes, smoke and irritating vapours when heated to decomposition.

Continued on Next Page
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Skin contact, eye contact, inhalation and ingestion.</th>
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</thead>
<tbody>
<tr>
<td>Acute Lethality</td>
<td>Based on toxicity of components.</td>
</tr>
<tr>
<td></td>
<td>Acute oral toxicity (LD50): &gt;5000 mg/kg (rat).</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity (LD50): &gt;2000 mg/kg (rabbit).</td>
</tr>
<tr>
<td></td>
<td>Acute inhalation toxicity (LC50): &gt;2500 mg/m³/4h (rat).</td>
</tr>
</tbody>
</table>

**Chronic or Other Toxic Effects**

- **Dermal Route:** Prolonged or repeated contact may cause skin irritation characterized by dermatitis or oil acne.
- **Inhalation Route:** Negligible breathing hazard at normal temperatures (up to 38°C) or recommended blending temperatures. Elevated temperatures or mechanical action may form vapours, mists or fumes. Inhalation of oil mists or vapours from hot oil may cause irritation of the upper respiratory tract.
- **Oral Route:** Low toxicity; has laxative effect.
- **Eye Irritation/Inflammation:** Repeated or prolonged contact may cause transient irritation, but no permanent damage.
- **Immunotoxicity:** Not available
- **Skin Sensitization:** This product is not expected to be a skin sensitizer, based on the available data and the known hazards of the components.
- **Respiratory Tract Sensitization:** This product is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.
- **Mutagenic:** Based on actual test results of base oils and results of similar products, severely hydrotreated base oils give negative results when tested for: (a) Salmonella Typhimurium TA98 using the Modified Ames Assay for Petroleum Product; (b) Salmonella-Escherichia coli/Mammalian-Microsome Reverse Mutation Assay (Ames test) with a Confirmatory Assay; (c) Structural Chromosomal Aberrations in Chinese Hamster Ovary (CHO) Cells.
- **Reproductive Toxicity:** This product is not expected to be a reproductive hazard, based on the available data and the known hazards of the components.
- **Teratogenicity/Embryotoxicity:** This product is not expected to be a teratogen or an embryotoxin, based on the available data and the known hazards of the components.
- **Carcinogenicity (ACGIH):** This product is not known to contain any chemicals at reportable quantities that are listed as A1 or A2 carcinogens by ACGIH.
- **Carcinogenicity (IARC):** This product is not known to contain any chemicals at reportable quantities that are listed as group 1, 2A or 2B carcinogens by IARC.
- **Carcinogenicity (NTP):** This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by NTP.
- **Carcinogenicity (IRIS):** Not available
- **Carcinogenicity (OSHA):** This product is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.

**Other Considerations**

- No additional remark.

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Environmental Fate</th>
<th>Not available</th>
<th>Persistance/ Bioaccumulation Potential</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD₅ and COD</td>
<td>Not available</td>
<td>Products of Biodegradation</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Additional Remarks**

- No additional remark.

### Section 13. Disposal Considerations

**Waste Disposal**

Preferred waste management priorities are: (1) recycle or reprocess; (2) incineration with energy recovery; (3) disposal at licensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations. Consult your local or regional authorities.

### Section 14. Transport Information

| TDG Classification | Not controlled under TDG (Canada). | Special Provisions for Transport | Not applicable. |

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Section 15. Regulatory Information

This product is acceptable for use under the provisions of WHMIS-CPR. All components of this formulation are listed on the CEPA-DSL (Domestic Substances List).

All components of this formulation are listed on the US EPA-TSCA Inventory.

All components of this product are on the European Inventory of Existing Commercial Chemical Substances (EINECS).

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

Please contact Product Safety for more information.

DSD/DPD (Europe) Not classified under the Dangerous Substances or Dangerous Preparations Directives.

HMSC (U.S.A.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

DOT (U.S.A.) (Pictograms)

NFPA (U.S.A.) Health 1 Fire Hazard 0 Reactivity 0 Specific hazard

Section 16. Other Information

References
Available upon request.
* Marque de commerce de Petro-Canada - Trademark

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists
ADR - Agreement on Dangerous Goods by Road (Europe)
ASTM - American Society for Testing and Materials
BOD5 - Biological Oxygen Demand in 5 days
CAN/CGA B149.2 - Propane Installation Code
CAS - Chemical Abstract Services
CEPA - Canadian Environmental Protection Act
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CFR - Code of Federal Regulations
CPR - Controlled Products Regulations
CPR - Code of Federal Regulations
DSD - Domestic Substance List
DSKD - Dangerous Substances Classification and Labeling (Europe)
EEC/EU - European Economic Community/European Union
EINECS - European Inventory of Existing Commercial Chemical Substances
EPCRA - Emergency Planning and Community Right to Know Act
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
FDA - Food and Drug Administration
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
HCS - Hazardous Communication System
HMIS - Hazardous Material Information System
IARC - International Agency for Research on Cancer
IRIS - Integrated Risk Information System
LD50/ LC50 - Lethal Dose/Concentration kill 50%
LDLo/LCLo - Lowest Published Lethal Dose/Concentration
NFPA - National Fire Protection Association
NIOSH - National Institute for Occupational Safety & Health
NPRI - National Pollutant Release Inventory
NSNR - New Substances Notification Regulations (Canada)
NTP - National Toxicology Program
OSHA - Occupational Safety & Health Administration
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
SARA - Superfund Amendments and Reorganization Act
SELE - Short Term Exposure Limit (15 minutes)
TDG - Transportation Dangerous Goods (Canada)
TDL0/ TCL0 - Lowest Published Toxic Dose/Concentration
TLm - Median Tolerance Limit
TLC - Toxic Substances Control Act
USEPA - United States Environmental Protection Agency
USP - United States Pharmacopoeia
WHMIS - Workplace Hazardous Material Information System

Information Contact Lubricants:
Western Canada, telephone: 1-800-661-1199; fax: (780) 464-9564
Ontario & Central Canada, telephone: 1-800-268-5850 and (905) 822-4222; fax: 1-800-201-6285
Quebec & Eastern Canada, telephone: 1-800-576-1686; fax: 800-201-6285

For Product Safety Information: (905) 804-4752

Data entry by Product Safety - JDW.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be handled with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.