**Material Safety Data Sheet**

### Section 1. Chemical Product and Company Identification

**Product Name**: DIESEL FUEL  
**Synonym**: Diesel 50, Diesel 50 LS, #1 Diesel, #1 Diesel LS, Diesel LC, Seasonal Diesel, Seasonal Diesel LS, Diesel AA, Domestic Marine Diesel, International marine Diesel, Seasonal Diesel Locomotive, Domestic Marine diesel LS, diesel -20°C (LS), LSD, Low Sulphur Diesel, dyed diesel, marked diesel, coloured diesel, Naval Distillate.  
**Code**: W104  
**Manufacturer**: PETRO-CANADA  
**P.O. Box 2844**  
**Calgary, Alberta**  
**T2P 3E3**  
**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).

### Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>Exposure Limits (ACGIH)</th>
<th>Manufacturer Recommendation</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Diesel oil.</td>
<td>68334-30-5</td>
<td>% (V/V) TLV-TWA(8 h) STEL CEILING</td>
<td>Not applicable</td>
<td>Consult local, state, provincial or territory authorities for acceptable exposure limits.</td>
</tr>
<tr>
<td>2) Proprietary additives.</td>
<td>Not available</td>
<td>&gt;99.9 Not established*</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>3) Aromatic content is 50% maximum (benzene: nil).</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>4) * Notice of Intended Change (2000): 100 mg/m³, skin, A3.</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Note to Physician**: Not available

### Section 3. Hazards Identification

**Potential Health Effects**: Eye contact may cause mild eye irritation. Skin contact can cause moderate to severe irritation and produce drying, cracking, or defatting dermatitis. Inhalation of vapours can cause CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, light-headedness, reduced coordination, unconsciousness and possibly death. Inhalation can also cause irritation of nose and throat. Aspiration of liquid drops into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe lung damage, or respiratory failure. For more information, refer to Section 11.

### 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. 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.

### Section 5. Fire-fighting Measures

**Flammability**: Class II - combustible liquid (NFPA).

<table>
<thead>
<tr>
<th>Flash Points</th>
<th>Flammable Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Fuel: Closed Cup: &gt;40°C (&gt;104°F)</td>
<td>LOWER: 0.7%, UPPER: 6%</td>
</tr>
<tr>
<td>Marine Diesel Fuel: Closed Cup: &gt;60°C (&gt;140°F)</td>
<td>Auto-Ignition Temperature: 225°C (437°F)</td>
</tr>
</tbody>
</table>

**Fire Hazards in Presence of Various Substances**: Flammable in presence of open flames, sparks, or heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite. May accumulate in confined spaces.

**Explosion Hazards in Presence of Various Substances**: Containers may explode in heat of fire. Do not cut, weld, heat, drill or pressurize empty container. Vapour explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

**Products of Combustion**: Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), sulphur compounds (H2S), water vapour (H2O), smoke and irritating vapours as products of incomplete combustion.

Continued on Next Page Available in French
**Fire Fighting Media and Instructions**

NAERG96, GUIDE 128, Flammable liquids (Non-polar/Water-immiscible).

**CAUTION:** This product has a moderate flash point above 40°C: Use of water spray when fighting fire may be inefficient.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions.

**SMALL FIRES:** Dry chemical, CO2, water spray or regular foam.

**LARGE FIRES:** Water spray, fog or regular foam. Do not use straight streams. Move containers from fire area if you can do it without risk.

Fires Involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting devices or any discoloration of tank. ALWAYS stay away from the ends of tanks. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

**Section 6. Accidental Release Measures**

**Material Release or Spill**

NAERG96, GUIDE 128, Flammable Liquids (Non-polar/Water-immiscible).

**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 absorbing 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 heat. Keep away from sources of ignition. Empty containers pose a fire risk. **DO NOT reuse empty containers without commercial cleaning or reconditioning.** Ground/bond line and equipment during pumping or transfer to avoid accumulation of static charge. **DO NOT ingest.** Do not breathe gas/vapour/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately. Avoid contact with skin and eyes. 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. Ground all equipment containing material.

**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**

**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.

**Hands**

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

**Feet**

Wear appropriate footwear to prevent product from coming in contact with feet and skin.

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State and Appearance</th>
<th>Viscosity</th>
<th>Colour</th>
<th>Pour Point</th>
<th>Odour</th>
<th>Softening Point</th>
<th>Odour Threshold</th>
<th>Boiling Point</th>
<th>Density</th>
<th>Vapour Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright oily liquid.</td>
<td>1.3-4.1 cSt @ 40ºC (104ºF)</td>
<td>Clear to yellow / brown. Low sulphur diesel fuels (&lt;0.05 wt % sulphur) are colourless to light yellow (and may be dyed red for taxation purposes). Regular sulphur diesel fuels (0.05-0.50 % sulphur) may be colourless to yellow / brown and are usually dyed red for taxation purposes.</td>
<td>Variable, 0ºC to -50ºC (32ºF to -58ºF)</td>
<td>Petroleum oil like.</td>
<td>Not applicable.</td>
<td>Not available</td>
<td>150-371ºC (302-700ºF)</td>
<td>0.85 kg/L @ 15ºC (Water = 1).</td>
<td>4.5 (Air = 1)</td>
</tr>
</tbody>
</table>
### Section 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosivity</td>
<td>Not available</td>
</tr>
<tr>
<td>Stability</td>
<td>The product is stable under normal handling and storage conditions.</td>
</tr>
<tr>
<td>Incompatible Substances / Conditions to Avoid</td>
<td>Reactive with oxidizing agents and acids.</td>
</tr>
</tbody>
</table>

### Decomposition Products
May release COx, NOx, SOx, H2S, H2O, smoke and irritating vapours when heated to decomposition.

### Section 11. Toxicological Information

#### Routes of Entry
- Skin contact, eye contact, inhalation, and ingestion.

#### Acute Lethality
- Acute oral toxicity (LD50): 7500 mg/kg (rat).

#### Chronic or Other Toxic Effects

- **Dermal Route:** Skin contact may cause moderate to severe irritation. Repeated exposure would produce drying and cracking or defatting dermatitis.

- **Inhalation Route:** Inhalation of vapours can cause CNS depression with symptoms of nausea, headaches, vomiting, dizziness, fatigue, light-headedness, reduced coordination, unconsciousness and possibly death. Inhalation can also cause irritation of nose and throat.

- **Oral Route:** Aspiration of liquid drops into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe lung damage, or respiratory failure.

- **Eye Irritation/Inflammation:** Eye contact may cause mild 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:** This product is not expected to be a mutagen, based on the available data and the known hazards of the components.

- **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):** ACGIH Notice of Intended Changed (2000): proposed A3: animal carcinogen. [Diesel oil]

- **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 known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.

#### Other Considerations
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

DieSEL FUEL

UN1202

3

III

Special Provisions for Transport

Not applicable.

Section 15. Regulatory Information

Other Regulations

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.

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
CAS - Chemical Abstract Services
CEPA - Canadian Environmental Protection Act
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
CPR - Code of Federal Regulations
CHIP - Chemicals Hazard Information and Packaging Approved Supply List
COD5 - Chemical Oxygen Demand in 5 days
CPR - Controlled Products Regulations
DOT - Department of Transport
DSCL - Dangerous Substances Classification and Labeling (Europe)
DSL - Domestic Substance List
EEC/EU - European Economic Community/European Union
EPCA - Emergency Planning and Community Right to Know Act
EPCRA - Emergency Planning and Community Right to Know Act
FPA - Federal Pesticide 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

For Copy of MSDS

Fuels & Solvents:

Western Canada, telephone: 403-296-4158; fax: 403-296-6551
Ontario & Central Canada, telephone: 1-800-668-0220; fax: 1-800-837-1228
Quebec & Eastern Canada, telephone: 514-640-8308; fax: 514-640-8385

For Product Safety Information: (905) 804-4752


Data entry by Product Safety - JDW.

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