

Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
	Not controlled		\oslash

Section 1.	Section 1. Chemical Product and Company Identification				
Product Name	PURITY FG00	Code	650-106, PFG00		
		DSL	See Section 15		
Synonym	Not available	TSCA	See Section 15		
Manufacturer	PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3	<u>In case of</u> Emergency	Petro-Canada: 403-296-3000 Canutec Transportation: 613-996-6666 Poison Control Centre:		
Material Uses	NSF H1 Registered. This product complies with FDA requirements for "Lubricants with Incidental Food Contact". It is intended for application on industrial and food equipment. It should not be added directly to the food product.		Consult local telephone directory for emergency number(s).		

Section 2. Composition and Information on Ingredients					
Exposure Limits (ACGIH)			GIH)		
Name	CAS #	% (W/W)	TLV-TWA(8 h)	STEL	CEILING
White oil and proprietary additives.	Mixture	100	Not established	Not established	Not established

Section 3. Hazards Identification. Potential Health Effects Prolonged or repeated contact may cause skin irritation, defatting, drying and dermatitis. Not expected to cause more than slight skin or eye irritation. With its relatively low vapour pressure, this product is not expected be inhaled in any appreciable quantity at ambient conditions. If heated to high temperatures or subjected to mechanical actions which produce vapours or mists, inhalation may cause respiratory tract irritation. Ingestion may produce a laxative effect. For more information refer to Section 11 of this MSDS.

Section 4. Fir	st Aid Measures
Eye Contact	No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the chemical is removed. If irritation persists, obtain medical advice.
Skin Contact	Quickly and gently, blot or brush away excess chemical. Wash gently and thoroughly with water and non-abrasive soap for 5 minutes or until chemical is removed. Remove contaminated clothing, shoes and leather goods (e.g., watchbands, belts, etc.). If irritation persists, repeat flushing. Obtain medical advice immediately. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
Inhalation	Remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.
Ingestion	NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz) of water to dilute material in stomach. If vomiting occurs naturally, rinse mouth and repeat administration of water. Obtain 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	Open cup: 249°C (480°F) (Cleveland)	Auto-Ignition Temperature	Not available	
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), smoke and irritating va	apours as products of	incomplete combustion.	

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Fire Fighting Media and Instructions NAERG2004, 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 discolouration 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.	PURITY FG00	Page Number: 2
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Section 6. Accidental Release Measures

Material Release or Spill	Consult current National Emergency Response Guide Book (NAERG) for appropriate spill measures if necessary. Ensure clean-up personnel wear appropriate personal protective equipment. Extinguish all ignition sources. Stop leak if safe to do so. Dike spilled material. Use appropriate inert absorbent material to absorb spilled product. Collect used absorbent for later disposal. Avoid contact with spilled material. Avoid contaminating sewers, streams, rivers and other water courses with spilled material. Notify appropriate authorities immediately.
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Section 7. Handling and Storage

Handling	Avoid contact with any sources of ignition, flames, heat, and sparks. Avoid eye contact. Avoid skin contact. Avoid inhalation of product vapours or mists. Wear proper personal protective equipment (See Section 8). Empty containers may contain product residue. Do not pressurize, cut, heat, or weld empty containers. Do not reuse containers without commercial cleaning and/or reconditioning. Personnel who handle this material should practice good personal hygiene during and after handling to help prevent accidental ingestion of this product. Properly dispose of contaminated leather articles including shoes that cannot be decontaminated.
Storage	Store away from incompatible and reactive materials (See section 5 and 10). Keep container tightly closed. Store in dry, cool, well-ventilated area.

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.
	As a minimum, safety glasses with side shields should be worn when handling this material.
	If this material may come in contact with the body during handling and use, we recommend wearing appropriate protective clothing to prevent contact with the skin. (Contact your PPE provider for more information.)
Respiratory	A minimum of NIOSH-approved air-purifying respirator with an organic vapour cartridge or canister with a dust, fume of mist filter (R, or P series) may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. A NIOSH-approved positive-pressure, air-supplied respirator or self-contained breathing apparatus may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.
Hands	If this material may come in contact with the hands during handling and use, we recommend wearing gloves of the following material(s): neoprene, nitrile, polyvinyl alcohol (PVA), fluoro-elastomer. Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
Feet	Wear appropriate footwear to prevent product from coming in contact with feet and skin.
Exposure Limits	This product is not expected to form a mist based on its properties and expected use.

Section 9. Physical and Chemical Properties

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Physical State and Appearance	Semi-solid.	Viscosity	Mineral Oil Blend: 182 cSt @ 40ºC, 17 cSt @ 100ºC, VI=99	
Colour	White.	Pour Point	Mineral Oil Blend: -15ºC (5ºF)	
Odour	Bland.	Softening Point	Not available	
Odour Threshold	Not available	Dropping Point	<u>≥</u> 149ºC	
Boiling Point	>371°C (699.8°F)	Penetration	400-430 (60 strokes)	
Specific Gravity	Mineral Oil Blend: 0.8770 kg/L @ 15°C (59°F).	Oil / Water Dist. Coeff.	Not available	
Vapor Density	Not available	Ionicity (in water)	Not available	
Vapor Pressure	Negligible at ambient temperature and pressure.	Dispersion Properties	Not available	
Volatility	Not available	Solubility	Insoluble in water.	

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Section 10. Stability and Reactivity			
Corrosivity	Non corrosive.		
Stability	The product is stable under normal handling and storage conditions.	Hazardous Polymerization	Will not occur under normal working conditions.
Incompatible Substances / Conditions to Avoid	Reactive with oxidizing agents.	Decomposition Products	May release COx, SOx, NOx, smoke and irritating vapours when heated to decomposition.

Routes of Entry	Skin contact, eye contact, inhalation and ingestion.
Acute Lethality	Not available
Chronic or Other Toxic Effects	
Dermal Route:	Prolonged or repeated contact may defat and dry skin, and cause dermatitis. Short-term exposure is expected to cause only slight irritation, if any.
Inhalation Route:	With its relatively low vapour pressure, this product is not expected be inhaled in any appreciable quantity at ambient conditions. If heated to high temperatures or subjected to mechanical actions which produce vapours or mists, inhalation may cause respiratory tract irritation.
Oral Route:	Ingestion of this product may lead to aspiration of the liquid, especially if vomiting occurs. This may resul in chemical pneumonitis (inflammation of the lungs) and/or pulmonary edema (an accumulation of fluid in the lungs). May produce a laxative effect.
Eye Irritation/Inflammation:	Short-term exposure is expected to cause only slight irritation, if any.
Immunotoxicity:	Not available
Skin Sensitization:	Contact with this product is not expected to cause skin sensitization, based upon the available data and the known hazards of the components.
Respiratory Tract Sensitization:	Contact with this product is not expected to cause respiratory tract sensitization, based upon the available data and the known hazards of the components.
Mutagenic:	This product is not known to contain any components at $>= 0.1\%$ that have been shown to cause mutagenicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a mutagen.
Reproductive Toxicity:	This product is not known to contain any components at $>= 0.1\%$ that have been shown to cause reproductive toxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a reproductive toxin.
Teratogenicity/Embryotoxicity:	This product is not known to contain any components at $>= 0.1\%$ that have been shown to cause teratogenicity and/or embryotoxicity. Therefore, based upon the available data and the known hazards or the components, this product is not expected to be a teratogen/embryotoxin.
Carcinogenicity (ACGIH):	This product is not known to contain any chemicals at reportable quantities that are listed as Group A1 o 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 carcinogene by NTP.
Carcinogenicity (IRIS):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogene by IRIS.
Carcinogenicity (OSHA):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogene by OSHA.
Other Considerations	No additional remark.

Section 12. Ecological Information

Environmental Fate		Persistance/ Bioaccumulation Potential	Not available
BOD5 and COD	Not available	Products of Biodegradation	Not available
Additional Remarks	No additional remark.		

Section 13. Disposal Considerations

Waste Disposal Spent/ used/ waste product may meet the requirements of a hazardous waste. Consult your local or regional authorities. Ensure that waste management processes are in compliance with government requirements and local disposal regulations.

Section 14. Transport Information			
TDG Classification	Not a hazardous material for transport according to the TDG Regulations. (Canada)	Special Provisions for Transport	Not applicable

Section 15. R	egulatory 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 formulation are listed on EINECS or are exempt. German Water Hazard Classification (Verwaltungsvorschrift wassergefährdende Stoffe - VwVwS) WGK=1 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)					
DSD/DPD (Europe) (Pictograms)	\oslash	DOT (U.S.A) (Pictograms)	Not evaluated for transport		
			Non évalué pour le transport		
HMIS (U.S.A.)	Health Hazard1Fire Hazard1Reactivity0	NFPA (U.S.A.)	Health 1 Fire Hazard Specific hazard		
	Personal Protection B		· · · · · · · · · · · · · · · · · · ·		

Section 16. Other Information References Available upon request. Marque de commerce de Petro-Canada - Trademark Glossary ACGIH - American Conference of Governmental Industrial Hygienists HCS - Hazardous Communication System ADR - Agreement on Dangerous goods by Road (Europe) HMIS - Hazardous Material Information System ASTM - American Society for Testing and Materials IARC - International Agency for Research on Cancer BOD5 - Biological Oxygen Demand in 5 days IRIS - Integrated Risk Information System CAS - Chemical Abstract Services LD50/LC50 - Lethal Dose/Concentration kill 50% CEPA - Canadian Environmental Protection Act LDLo/LCLo - Lowest Published Lethal Dose/Concentration NFPA - National Fire Prevention Association CERCLA - Comprehensive Environmental Response, Compensation NIOSH - National Institute for Occupational Safety & Health and Liability Act CFR - Code of Federal Regulations NPRI - National Pollutant Release Inventory CHIP - Chemical Hazard Information and Packaging Approved Supply NSNR - New Substances Notification Regulations (Canada) List NTP - National Toxicology Program COD - Chemical Oxygen Demand OSHA - Occupational Safety & Health Administration CPR - Controlled Products Regulations PEL - Permissible Exposure Limit DOT - Department of Transportation (U.S.A.) RCRA - Resource Conservation and Recovery Act DSCL - Dangerous Substances Classification and Labeling (Europe) SARA - Superfund Amendments and Reorganization Act DSD/DPD - Dangerous Substance or Dangerous Preparations STEL - Short Term Exposure Limit (15 minutes) Directives (Europe) TDG - Transportation Dangerous Goods (Canada) DSL - Domestic Substance List (Canada) TDLo/TCLo - Lowest Published Toxic Dose/Concentration TLV-TWA - Threshold Limit Value-Time Weighted Average EEC/EU - European Economic Community/European Union EINECS - European Inventory of Existing Commercial Chemical TLm - Median Tolerance Limit TSCA - Toxic Substances Control Act Substances EPCRA - Emergency Planning And Community Right-To-Know Act USEPA - United States Environmental Protection Agency FDA - Food and Drug Administration USP - United States Pharmacopoeia FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act WHMIS - Workplace Hazardous Material Information System Continued on Next Page Available in French Internet: www.petro-canada.ca/msds

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Information Contact	The Canadian Controlled Products Regulations (CPR) (Under the Hazardous Products Act, part of the WHMIS legislation) only apply to WHMIS Controlled (i.e., hazardous) products. Therefore, the CPR and the 3-year update rule specified therein do not apply to WHMIS Non-Controlled products. Although this is true, customarily Petro- Canada reviews and updates Non- Controlled product MSDS if a customer requests such an update. These Non- Controlled product updates are given a lower priority than Controlled products but are handled as soon as practicable. If you would like to verify if the MSDS you have is the most current, or you require any further information, please contact:	Prepared by Product Safety - JDW on 9/7/2007. Data entry by Product Safety - DSR.
	Lubricants: Western Canada, telephone: (001) 1-800- 661-1199; fax: (001) (780) 464-9564 Ontario & Central Canada, telephone: (001) 1-800-268-5850 and (001) (905) 822- 4222; fax: (001) 1-800-201-6285 Quebec & Eastern Canada, telephone: (001) 1-800-576-1686; fax: (001) 1-800-201- 6285	
	For Product Safety Information: (905) 804- 4752	