



NFPA	HMIS (U.S.A.)	Rating	Protective Clothing	DOT (pictograms)
	Health Hazard (1)	0 Insignificant		
	Fire Hazard (4)	1 Slight		
	Reactivity (0)	2 Moderate		
	Personal Protection (H)	3 High		
		4 Extreme		

Section I. Chemical Product and Company Identification	
Product Name PURITY FG MF LUBRICANT	Code W420E, SAP: PFMF
Synonym Not available	DSL See Section 15
Manufacturer PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3	TSCA See Section 15
Material Uses Purity FG MF Lubricant is an advanced multipurpose food grade lubricant in an aerosol can. NSF H1 Registered. All components comply with FDA 21 CFR 178.3570 " 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.	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 II. Composition and Information on Ingredients					
Name	CAS #	% (W/W)	Exposure Limits (ACGIH)		
			TLV-TWA(8 h)	STEL	CEILING
Mixture of severely hydrotreated paraffinic oils with proprietary additives.	Mixture	70	5 mg/m ³ (oil mist)	10 mg/m ³ (oil mist)	Not established
CFC free propellant containing: (Liquefied Petroleum Gas)	68476-85-7	30	1000 ppm	Not established	Not established
Propane	74-98-6	49.7	1000 ppm	Not established	Not established
iso-Butane	75-28-5	50.3	1000 ppm	Not established	Not established
Manufacturer Recommendation	Not applicable				
Other Exposure Limits	Consult local, state, provincial or territory authorities for acceptable exposure limits.				

Section III. Hazards Identification.	
Potential Health Effects	The product is contained under pressure. Do not puncture, incinerate or heat container as contents may explode. Flammable aerosol. Exercise caution when handling this material. At high concentrations, the propellant is a simple asphyxiant and displaces oxygen from the breathing atmosphere. Lack of oxygen may cause CNS depression characterized by dizziness, headaches, nausea, vomiting, fatigue, light-headedness and reduced coordination. Severe overexposure may lead to a coma and/or possible death. The lubricant in the liquid form may cause transient irritation to eyes and skin. Relatively non-toxic via ingestion. Prolonged or repeated inhalation of mist or vapours may cause irritation of the respiratory tract. For more information refer to Section 11 of this MSDS.

Section IV. First Aid Measures	
Eye Contact	No effects expected. If irritation does occur, remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.
Skin Contact	No health effects are expected from skin exposure. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed. As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g., watchbands, belts, etc.). If irritation persists, obtain medical advice.
Inhalation	If symptoms are experienced remove source of contamination or move victim to fresh air and obtain medical advice.
Ingestion	Ingestion is not an applicable route of exposure for gases.
Note to Physician	Not available

Section V. Fire-fighting Measures

Flammability	Propellant is a flammable gas.	Flammable Limits	Propellant: LOWER: 1.4% UPPER: 9.5%
Flash Points	Propellant: -104 to -73°C (-155 to -100°F). (Tag.)	Auto-Ignition Temperature	Not available
Fire Hazards in Presence of Various Substances	Extremely flammable in presence of open flames, sparks, and heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back.	Explosion Hazards in Presence of Various Substances	Do not cut, weld, heat, drill or pressurize empty container. Containers may explode in heat of fire. Ruptured cylinders may rocket. Risk of BLEVE (Boiling Liquid Expanded Vapour Explosion).
Products of Combustion	Carbon oxides (CO, CO ₂), nitrogen oxides (NO _x), sulphur oxides (SO _x), phosphorus compounds (PO _x), carbonyl halides, smoke and irritating vapours as products of incomplete combustion.		
Fire Fighting Media and Instructions	NAERG2004, GUIDE 126, Gases-Compressed. 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. SMALL FIRE: use DRY chemicals, or CO ₂ . LARGE FIRE: use water spray, fog or foam. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tank due to fire. Handle damaged cylinders with extreme care. Self contained breathing apparatus (SCBA) is required for fire fighting personnel.		

Section VI. Accidental Release Measures

Material Release or Spill	IN THE EVENT OF A LARGE SPILL CONSIDER THE FOLLOWING CONTROL MEASURES: Extinguish all ignition sources. Ventilate area. Avoid breathing vapours or mists of material. Notify appropriate authorities immediately. Evacuate non-essential personnel. Ensure clean-up personnel wear appropriate personal protective equipment. Ground and bond all equipment used to clean up the spilled material, as it may be a static accumulator. Consult current National Emergency Response Guide Book (NAERG) for appropriate spill measures if necessary.
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Section VII. Handling and Storage

Handling	FLAMMABLE MATERIAL. Handle with care. Avoid contact with any sources of ignition, flames, heat, and sparks. Avoid confined spaces and areas with poor ventilation. Avoid inhalation of product vapours or mists. Avoid contact with any incompatible or reactive materials. Ensure all equipment is grounded/bonded. Exercise caution when washing/drying clothing contaminated with flammable materials. 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.
Storage	Store as flammable material. Store in dry, cool, well-ventilated area. Store away from heat and sources of ignition. Store away from incompatible and reactive materials (See section 5 and 10). Ensure the storage containers are grounded/bonded.

Section VIII. 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	As a minimum, safety glasses with side shields should be worn when handling this material.
Body	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 NIOSH-approved air-purifying respirator with an organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.
Hands	If this material may come in contact with the hands during handling and use, we recommend wearing gloves of the following material(s): nitrile, neoprene, polyvinyl alcohol (PVA), fluoro-elastomer. 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.

Section IX. Physical and Chemical Properties

Physical State and Appearance	Aerosol, stored under pressure.	Viscosity	Purity Oil: 151 cSt @ 40°C (104°F), 19.8 cSt @ 100°C (212°F). VI = 150
Colour	Purity Oil is clear and bright.	Pour Point	Purity Oil: -12°C (10.4°F).
Odour	Hydrocarbon or petroleum oil like.	Softening Point	Not applicable.
Odour Threshold	Not available	Dropping Point	Not applicable.
Boiling Point	Purity Oil: >377°C (>711°F).	Penetration	Not applicable.
Density	Purity Oil: 0.862 kg/L @ 15°C (59°F).	Oil / Water Dist. Coeff.	Not available
Vapour Density	Not available	Ionicity (in water)	Not available
Vapour Pressure	Negligible at ambient temperature and pressure.	Dispersion Properties	Propellant is a volatile gas, while Purity oil is nonvolatile and immobile.
Volatility	Propellant is a volatile gas, but Purity oil is non-volatile.	Solubility	Insoluble in cold water, soluble in non-polar hydrocarbon solvents.

Section X. 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, reducing agents, acids, alkalis, liquid oxygen, alkali metals and their hydroxides.	Decomposition Products	May release COx, NOx, SOx, POx, carbonyl halides, smoke and irritating vapours when heated to decomposition.

Section XI. Toxicological Information



Routes of Entry	Skin contact, eye contact and inhalation.		
Acute Lethality	Acute toxicity information is not available for the product as a whole, therefore, data for some of the ingredients is provided below: <u>Base Oils:</u> Acute Oral toxicity (LD50): >5000 mg/kg (rat) Acute Dermal toxicity (LD50): >2000 mg/kg (rabbit) <u>Isobutane (75-28-5):</u> Acute Inhalation toxicity (LC50): 368000 ppm/4h (mouse)		
Chronic or Other Toxic Effects	<p>Dermal Route: Short-term exposure is expected to cause only slight irritation, if any. Prolonged or repeated contact may defat and dry skin, and cause dermatitis.</p> <p>Inhalation Route: At high concentrations, the propellant is a simple asphyxiant and displaces oxygen from the breathing atmosphere. Lack of oxygen may cause CNS depression characterized by dizziness, headaches, nausea, vomiting, fatigue, light-headedness and reduced coordination. Severe overexposure may lead to a coma and/or possible death. Prolonged or repeated inhalation of mist or vapours may cause irritation of the respiratory tract.</p> <p>Oral Route: Based upon the available data and the known hazards of the components, if accidentally ingested in small amounts, this product is not expected to cause any serious toxic effects.</p> <p>Eye Irritation/Inflammation: Short-term exposure is expected to cause only slight irritation, if any.</p> <p>Immunotoxicity: Not available</p> <p>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.</p> <p>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.</p> <p>Mutagenic: This product is not known to contain any components at $\geq 0.1\%$ 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.</p> <p>Reproductive Toxicity: This product is not known to contain any components at $\geq 0.1\%$ 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.</p> <p>Teratogenicity/Embryotoxicity: This product is not known to contain any components at $\geq 0.1\%$ that have been shown to cause teratogenicity and/or embryotoxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a teratogen/embryotoxin.</p> <p>Carcinogenicity (ACGIH): This product is not known to contain any chemicals at reportable quantities that are listed as Group A1 or A2 carcinogens by ACGIH.</p>		

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):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by IRIS.
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 XII. Ecological Information			
Environmental Fate	Not available	Persistence/Bioaccumulation Potential	Not available
BOD5 and COD	Not available	Products of Biodegradation	Not available
Additional Remarks	No additional remark.		

Section XIII. Disposal Considerations	
Waste Disposal	Incineration may not be advisable since the product container may still contain contents under pressure at the time of disposal. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations. Consult your local or regional authorities.

Section XIV. Transport Information	
DOT Classification	AEROSOLS, 2.1, UN1950.
Special Provisions for Transport	See 49 CFR

Section XV. Regulatory Information	
Other Regulations	<p>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).</p> <p>All components of this formulation are listed on the US EPA-TSCA Inventory.</p> <p>All components of this product are on the European Inventory of Existing Commercial Chemical Substances (EINECS).</p> <p>German Water Hazard Classification (Verwaltungsvorschrift wassergefährdende Stoffe - VwVwS) WGK=1</p> <p>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.</p> <p>Please contact Product Safety for more information.</p>
DSD/DPD (EEC)	<p>R12- Extremely flammable. S2- Keep out of the reach of children. S9- Keep container in a well-ventilated place. S16- Keep away from sources of ignition - No smoking. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p>
ADR (Europe) (Pictograms)	<p>WHMIS (Canada) A, B-5</p> <p></p>
TDG (Canada) (Pictograms)	<p></p>

Section XVI. Other Information	
References	<p>Available upon request. * Marque de commerce de Petro-Canada - Trademark</p>
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
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act	NFPA - National Fire Prevention Association
CFR - Code of Federal Regulations	NIOSH - National Institute for Occupational Safety & Health
CHIP - Chemical Hazard Information and Packaging Approved Supply List	NPRI - National Pollutant Release Inventory
COD - Chemical Oxygen Demand	NSNR - New Substances Notification Regulations (Canada)
CPR - Controlled Products Regulations	NTP - National Toxicology Program
DOT - Department of Transportation (U.S.A.)	OSHA - Occupational Safety & Health Administration
DSCL - Dangerous Substances Classification and Labeling (Europe)	PEL - Permissible Exposure Limit
DSD/DPD - Dangerous Substance or Dangerous Preparations Directives (Europe)	RCRA - Resource Conservation and Recovery Act
DSL - Domestic Substance List (Canada)	SARA - Superfund Amendments and Reorganization Act
EEC/EU - European Economic Community/European Union	STEL - Short Term Exposure Limit (15 minutes)
EINECS - European Inventory of Existing Commercial Chemical Substances	TDG - Transportation Dangerous Goods (Canada)
EPCRA - Emergency Planning And Community Right-To-Know Act	TDLo/TCLo - Lowest Published Toxic Dose/Concentration
FDA - Food and Drug Administration	TLV-TWA - Threshold Limit Value-Time Weighted Average
FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act	Tm - Median Tolerance Limit
	TSCA - Toxic Substances Control Act
	USEPA - United States Environmental Protection Agency
	USP - United States Pharmacopoeia
	WHMIS - Workplace Hazardous Material Information System

For Copy of MSDS

Internet: www.petro-canada.ca/msds

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: 1-800-201-6285

For Product Safety Information: (905) 804-4752

Prepared by Product Safety - JDW on 6/13/2006.

Data entry by Product Safety - DSR.

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