Material Safety Data Sheet

PURITY$_{TM}$ FG2 WITH MICROL$_{TM}$

1 . Product and company identification

Common name : PURITY$_{TM}$ FG2 WITH MICROL$_{TM}$

Code : PFGMIC2, 650-113

Material uses : Purity FG2 with Microl is a food grade grease.
Microl is an antimicrobial product protection agent which protects the mineral oil based grease from microbes that can cause product degradation.
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.

Manufacturer : PETRO-CANADA
P.O. Box 2844
150 – 6th Avenue South-West
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).

2 . Hazards identification

Physical state : Semi-solid.

Odour : Bland.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency overview : No specific hazard.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes : Slightly irritating to the eyes.

Skin : Slightly irritating to the skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Medical conditions aggravated by over-exposure : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation.

See toxicological information (section 11)

3 . Composition/information on ingredients

Name	CAS number	%
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	Mixture	-

The base oil may be a mixture of the following CAS#s: 8042-47-5, 64742-46-7, 64742-47-8, 64742-52-5, 64742-54-7, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 178603-64-0, 178603-65-1, 178603-66-2, 445411-73-4

4 . First-aid measures

Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin contact : Wash skin thoroughly with soap and water or use recognised skin cleanser. Get medical attention if irritation occurs. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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

Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

5 . Fire-fighting measures

Flammability of the product : May be combustible at high temperature.

Products of combustion : Carbon oxides (CO, CO2), nitrogen oxides (NOx), phosphorus oxides (POx), smoke and irritating vapours as products of incomplete combustion.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : No specific hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards : Low fire hazard. This material must be heated before ignition will occur.

Special remarks on explosion hazards : Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

6 . Accidental release measures

Personal precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

7 . Handling and storage

Handling : Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk. Evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles.

Storage : Keep container tightly closed. Store away from incompatible materials (see section 10). Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Product name	Exposure limits
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	**ACGIH TLV (United States). Notes: (oil mist)** TWA: 5 mg/m^3 8 hour(s). STEL: 10 mg/m^3 15 minute(s).

Consult local authorities for acceptable exposure limits.

Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended: organic vapour filter

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Recommended: neoprene, nitrile, polyvinyl alcohol (PVA), Viton.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

Physical state : Semi-solid.

Flash point : Mineral Oil Blend:
Open cup: 249°C (480.2°F) (Cleveland.).

Auto-ignition temperature : Not available.

Flammable limits : Not available.

Colour : Cream-white

Odour : Bland.

pH : Not available.

Boiling/condensation point : Not available.

Pour Point : Mineral Oil Blend:
-15ºC (5ºF)

Melting/freezing point : Not available.

Relative density : Mineral Oil Blend:
0.877 kg/L @ 15ºC (59ºF)

Vapour pressure : Not available.

Vapour density : Not available.

Volatility : Not available.

Odour threshold : Not available.

Evaporation rate : Not available.

9 . Physical and chemical properties

Viscosity : Mineral Oil Blend:
182 cSt @ 40ºC (104ºF), 17 cSt @ 100ºC (212ºF), VI=99

Solubility : Insoluble in water.

LogK$_{ow}$: Not available.

Softening Point : Not available.

Dropping Point : 309ºC (588ºF)

Penetration : 293 (60 strokes)

Physical/chemical properties comments : Not available.

10 . Stability and reactivity

Stability and reactivity : The product is stable.

Conditions of instability : Not applicable.

Incompatibility with various substances : Reactive with oxidising agents, acids, alkalis, reducing agents, metals and moisture.

Hazardous decomposition products : May release COx, NOx, POx, CaOx, smoke and irritating vapours when heated to decomposition.

Hazardous polymerisation : Will not occur.

11 . Toxicological information

Toxicity data

Product/ingredient name	Test	Result	Route	Species
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	LD50 LD50 LC50	>5000 mg/kg >2000 mg/kg >2500 mg/m^3 (4 hour(s))	Oral Dermal Inhalation	Rat Rabbit Rat

Specific effects

Carcinogenic effects : Not listed as carcinogenic by OSHA, NTP or IARC.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Sensitisation

Ingestion : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Eyes : Slightly irritating to the eyes.

Skin : Slightly irritating to the skin.

Synergistic products : Not available.

12 . Ecological information

Ecotoxicity data

Product/ingredient name	Species	Period	Result

Environmental precautions : No known significant effects or critical hazards.

Bioconcentration factor Not available.

BOD and COD Not available.

Biodegradable/OECD Not available.

Mobility Not available.

Special remarks on the products of biodegradation Not available.

13 . Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
TDG Classification	Not regulated.	-	-	-		-
DOT Classification	Not available.	Not available.	Not available.	-		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Not regulated.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Risk phrases : This product is not classified according to EU legislation.

International regulations

International lists

Canada inventory status : A component or components of this product is/are not listed on the Canadian Domestic Substances List (DSL).

EC INVENTORY (EINECS/ELINCS) : Not determined.

TSCA 8(b) inventory : Listed

16 . Other information

Hazardous Material Information System (U.S.A.) :

Health	1
Fire hazard	1
Reactivity	0
Personal protection	B

16 . Other information

National Fire Protection Association (U.S.A.) :

References : Available upon request.
TM/MC Marque de commerce de Petro-Canada - Trademark

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For Copy of (M)SDS : 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:

Internet: lubricants.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

Notice to reader

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 used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.