

CHRISTO-LUBE® MCG 180

LUBRICATION TECHNOLOGY, INC

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Section 1 - Chemical product and Company information

Date Prepared: January 24th, 2014

Product Name: CHRISTO-LUBE® MCG 180

Chemical Name: Mixture of perfluoropolyethers and polytetrafluoroethylene

Chemical Family: Fluorocarbons, fluoropolymers

Synonyms: Mixture

Emergency Telephone: (740)574-5150

Emergency Overview:

White grease. Thermal decomposition will generate hydrogen fluoride (HF), which is corrosive.

Section 2 - Compositional information

<u>Name:</u>	<u>CAS#</u>	<u>Approximate Weight (% wt.):</u>
1,1,2,2-Tetrafluoroethene, oxidized, polymerized	69991-61-3	Proprietary
1,1,2,3,3,3-hexa-fluoro oxidized, polymerized	69991-67-9	Proprietary
Polytetrafluoroethylene	9002-84-0	Proprietary

Section 3 - Potential Health Effects

Effects of Overexposure:

Eye Contact

Eye contact may cause slight irritation.

Skin Contact

Skin contact may cause slight irritation.

Inhalation

Inhalation of vapors or mists may cause irritation of the mucous membranes and respiratory tract.

Ingestion

Not an expected exposure route. Ingestion may cause nausea and vomiting.

Section 4 - First Aid Measures

Eye Contact:

Flush eyes for 15 minutes with copious amounts of water, retracting eyelids often. Seek medical attention if irritation persists.

Skin Contact:

Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes.

Inhalation:

If symptoms of irritation or discomfort are experienced, or person is overcome by exposure, remove to fresh air. Give oxygen if breathing is difficult or artificial respiration if person is not breathing.

Ingestion:

If conscious, drink three to four 8 ounce glasses of water or milk. Call a physician. If unconscious, immediately take affected person to a hospital. Do not give anything by mouth to an unconscious person.

Section 5 - Fire Fighting Measures

Flash Point: Not Applicable

Lower Explosive Limit: Not Applicable

Upper Explosive Limit: Not Applicable

Autoignition Temperature: Not Applicable

Extinguishing Media: Water (spray or fog), foam, dry chemical or carbon dioxide (CO₂).

Unusual Fire Hazards:

Fluoropolymers will degrade upon prolonged heating or in a fire, liberating hydrogen fluoride (HF) and carbonyl fluoride (COF₂). This gas is toxic if inhaled or it comes into contact with moist skin. HF has an ACGIH PEL TLV (8hr TWA) of 0.5ppm and a ceiling limit of 2 ppm (1.7mg/m³). COF₂ has an ACGIH TLV of 2 ppm (5.4 mg/m³) and an OSHA PEL

TWA of 2 ppm (5 mg/m³).

Fire Fighting Procedures:

Use self contained breathing apparatus (SCBA) and skin protection for acid gas exposure. Do not enter fire area without proper protection. Fight fire from safe distance. If possible, air monitoring should be performed.

Section 6 - Accidental Release Measures

Releases: In case of a release or spill, absorb material onto vermiculite or similar inert absorbent. Use CHRISTO-KLEEN 1 Solvent to clean up any residual fluid. Place spilled material into covered container for disposal. Dispose of according to applicable local, state and federal regulations. Extinguish all ignition sources and evacuate the area. Exercise caution; spill area may be slippery.

Section 7 - Handling and Storage

Wash hands after use and before handling food or applying cosmetics. Do not use tobacco products in the immediate area. Keep containers closed. Keep away from heat, sparks and flames. Do not store near combustible materials.

Section 8 - Exposure Controls/Personal Protection

ACGIH Threshold Limit Value (8 hr. time weighted average)

None established

OSHA Permissible Exposure Limit (8 hr. time weighted average)

None established

Engineering Controls:

Ventilation Requirements:

Local Exhaust: Vent vapors or mists generated by processing away from operating personnel. Local exhaust ventilation at a rate of 50 feet per minute.

Personal Protective Equipment:

Respiratory Protection:

No occupational exposure standards have been developed for this material. In situations where exposure to vapors or mists is likely, NIOSH/MSHA approved respirators equipped with acid gas cartridges are recommended. Respirator use limitations made by NIOSH/MSHA or the manufacturer must be observed. Respiratory protection programs must be in accordance with requirements set forth in 29 CFR 1910.134.

Eye/Face Protection:

ANSI Z87.1 approved safety glasses with side shields or equivalent.

Skin Protection:

Rubber or latex gloves recommended but not necessary.

Section 9 - Physical and Chemical Properties

Appearance: Grease

Color: White

Odor: Odorless

Vapor Pressure: Not available

Vapor Density (Air=1): Not available

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: 1.7 - 1.9

Solubility in Water: Insoluble

% Volatile by Volume: 0

Section 10 - Stability and Reactivity

Stability:

This material is stable.

Reactivity:

This material is not reactive.

Conditions to Avoid:

Heat, sparks, flames, and other ignition sources; avoid heating above 290 C/554 F.

Incompatibility/Materials to Avoid:

Alkali metals and halogenated compounds. Strong or non-aqueous alkali or Lewis acids above 100 C/212 F.

Hazardous Decomposition Products:

Thermal decomposition of this product will generate hydrogen fluoride (HF), which is corrosive, causing burns on contact with skin and other tissue.

Section 11 - Toxicological Information

Data listed are for perfluoropolyethers:

Rat oral LD50: greater than 25.65 g/kg

Rat intraperitoneal LD50: greater than 25 g/kg

Rat dermal LD50: greater than 2 g/kg

Rabbit skin irritation: not irritating

Rabbit eye irritation: not irritating

Guinea pig sensitization: not a sensitizer

Section 12 - Ecological Information

No ecological information is available for this material.

Section 13 - Disposal Considerations

Waste Disposal: Material, as supplied, is not a hazardous waste. Landfill according to current federal, state and local regulations, or incinerate in a high-temperature incinerator designed to burn fluorine-containing materials. Processing, use or contamination may make this information inaccurate or incomplete.

Section 14 - Transportation information

Sea (IMO/IMDG) – not regulated

Air (ICAO/IATA) – not regulated

US Dept. of Transportation – not regulated

Section 15 - Regulatory information

All components of this product are listed on the Toxic Substances Control Act (TSCA) Section 8(b) Chemical Inventor and the Canadian Environmental Protection Act (CEPA) provisional domestic substances list (DSL). This product is not a "hazardous substance" as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is not a "controlled product" as defined by the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA Section 302 Extremely Hazardous Substances: Not listed

SARA 311/312: Acute: No

Chronic: No

Fire: No

Reactivity: No

Sudden Release of Pressure: No

SARA Section 313 Toxic Chemicals: Not listed

Polytetrafluoroethylene is listed on the Pennsylvania Hazardous Substances List.

Section 16 - Additional Information

NFPA Ratings (Scale of 0-4):

Health = 1

Fire = 0

Reactivity = 0

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product). To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Lubrication Technology, Inc. nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the manner of use and whether any patents are infringed.

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