


Krytox® PFPE/PTFE Greases (GPL 20(X) Series)

Version 2.1

Revision Date 12/03/2009

Ref. 150000001170

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Krytox® PFPE/PTFE Greases (GPL 20(X) Series)
 Product Grade/Type : GPL: 200, 201, 202, 203, 204, 205, 206, 207, 207-500
 XHT-S, XHT-SX
 FG: 20, 22, 24, 26
 NRT: 8900, 8904, 8906, PLSS
 Sealant: ST-45, ST-63
 EG-2000, EG-3000
 LVP, LS-23, AUT 2045, UM 04 PGL, TLC Grease

MSDS Number : 150000001170
 Product Use : Lubricant

Manufacturer : DuPont
 1007 Market Street
 Wilmington, DE 19898

Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
 Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
 Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

Other information : professional use

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

The product as such is not hazardous. The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

Potential Health Effects

Eyes : May cause eye irritation.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No. | Concentration |
|--------------------|---------|---------------|
| Perfluoropolyether | | 55 - 85 % |
| PTFE | | 15 - 45 % |

SECTION 4. FIRST AID MEASURES

Skin contact : Wash off with soap and plenty of water.



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- Eye contact : Rinse with plenty of water. If eye irritation persists, consult a specialist.
- Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
- Ingestion : Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- General advice : When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5. FIRE-FIGHTING MEASURES

- Flammable Properties
- Flash point : Method : Pensky-Martens closed cup - PMCC
does not flash
- Thermal decomposition : 300 °C (572 °F)
- Fire and Explosion Hazard : In fire conditions, toxic decomposition products may be formed.
- Suitable extinguishing media : The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Firefighting Instructions : Wear self-contained breathing apparatus and protective suit. Standard procedure for chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Refer to protective measures listed in sections 7 and 8.
- Spill Cleanup : Shovel into suitable container for disposal.
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Avoid breathing vapors from overheated material. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. General industrial hygiene practice.
- Storage : No special storage conditions required. Keep container closed to prevent contamination. No decomposition if stored and applied as directed.



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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : In the event that the polymer is heated above 300°C (572 F) local ventilation should be used to avoid exposure to fumes.
- Personal protective equipment
- Respiratory protection : No personal respiratory protective equipment normally required. In the case of hazardous fumes caused by overheating, wear self-contained breathing apparatus.
- Hand protection : Additional protection: No particular glove type is recommended, but nitrile may used.
- Eye protection : Safety glasses
- Skin and body protection : No PPE is specified however, avoid contact with skin, eyes, and clothing. Preventive skin protection
- Exposure Guidelines
- Exposure Limit Values
- None established.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : grease
- Color : white
- Odor : none
- pH : neutral
- Melting point/range : 320 °C (608 °F)
- Specific Gravity : 1.89 - 1.93 at 24 °C (75 °F)
- Water solubility : insoluble

SECTION 10. STABILITY AND REACTIVITY

- Stability : Stable under recommended storage conditions.
- Conditions to avoid : Decomposition temperature 300 °C (572 °F)
- Hazardous decomposition products : Hazardous thermal decomposition products: Fluorinated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

- Krytox® PFPE/PTFE Greases (GPL 20(X) Series)
- Oral ALD : > 11,000 mg/kg , rat
- Skin irritation : Species: rabbit, No skin irritation Draize Test
- Eye irritation : Species: rabbit, Mild eye irritation Draize Test



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- Sensitisation : Species: guinea pig; Animal test did not cause sensitization by skin contact. Method: Buehler Test
- Further information : The substance is a polymer and is not expected to produce toxic effects.

SECTION 12. ECOLOGICAL INFORMATION

- Aquatic Toxicity
 - Perfluoropolyether
 - 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
Aquatic toxicity is unlikely due to low solubility.
 - 48 h static test EC50 : Daphnia magna (Water flea) > 1,000 mg/l
 - PTFE : Aquatic toxicity is unlikely due to low solubility.
- Additional ecological information : No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

- Waste Disposal : In accordance with local and national regulations.
- Environmental Hazards : Dispose of container properly.
If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

- TSCA Status : On the inventory, or in compliance with the inventory
- PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances):
Polytetrafluoroethylene
Polytetrafluoroethylene is listed, but we believe it was listed in error and have petitioned to have it delisted.

SECTION 16. OTHER INFORMATION

- MSDS preparation date : 12/03/2009
- Restrictions for use : Do not use DuPont materials in medical applications involving implantation



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in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

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Contact person : MSDS Coordinator, DuPont Chemical Solutions Enterprise, Wilmington, DE 19898, (800) 441-7515

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