

**Krytox[®] PFPE Oil with Soluble Additive**

Version 3.4

Revision Date 08/06/2010

Ref. 15000000932

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 Oil with Soluble Additive
Product Grade/Type : XP-1: A0, A1, A2, A3, A4, A5, A6, A7, A7-500
VPF: 1506XP, 1514XP, 1525XP, 1531XP
FG 50, NRT 8805, R9A1, ACW

MSDS Number : 15000000932

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

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Inhalation of decomposition products from overheating may cause lung irritation or shortness of breath.

Potential Health Effects

Skin : May cause allergic skin reaction. Itching, Rash, Swelling.

Eyes : May cause eye irritation. Discomfort, tearing, Blurred vision.

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.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Perfluoropolyether		95 - 100 %
Proprietary Additive		0 - 5 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Wash off with soap and plenty of water.
- 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 : 350 °C (662 °F)
- Fire and Explosion Hazard : In fire conditions, toxic decomposition products may be formed. (see also section 10)
- Suitable extinguishing media : The product itself does not burn.

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Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Firefighting Instructions : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.
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.

Spill Cleanup : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling.
General industrial hygiene practice.

Storage : No special storage conditions required. Keep container closed to prevent contamination.
No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : In the event that the polymer is heated above 350°C (662°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.

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Hand protection : Additional protection: Impervious gloves

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 : viscous liquid

Color : colourless

Odor : none

pH : neutral

Pour point : < -70 - -30 °C (-94 - -22 °F)

Specific Gravity : ca. 1.9

Water solubility : insoluble

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable under recommended storage conditions.

Conditions to avoid : Temperature > 350 °C (> 662 °F)

Hazardous decomposition products : Hazardous thermal decomposition products:
Fluorinated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

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Further information : No data is available on the product itself.

Perfluoropolyether
Dermal ALD : ca. > 17,000 mg/kg , rabbit

Oral LD50 : > 37,400 mg/kg , rat

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Inhalation 4 h ALC	:	ca. > 19.54 mg/l , rat
Skin irritation	:	slight irritation, rabbit
Eye irritation	:	slight irritation, rabbit
Skin sensitization	:	Patch test on human volunteers did not demonstrate sensitization properties., human
Mutagenicity	:	Did not cause genetic damage in cultured bacterial cells.
Proprietary Additive		
Oral LD50	:	> 5,000 mg/kg , rat
Skin irritation	:	slight irritation, rabbit
Eye irritation	:	Eye irritation, rabbit
Skin sensitization	:	Causes sensitization., guinea pig
Mutagenicity	:	Did not cause genetic damage in cultured bacterial cells.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity		
Perfluoropolyether		
96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l The substance is a polymer and is not expected to produce toxic effects.
48 h EC50	:	Daphnia magna (Water flea) > 1,000 mg/l
Additional ecological information	:	No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : In accordance with local and national regulations.



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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

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use DuPont materials in medical applications involving implantation 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 Chemicals and Fluoroproducts, Wilmington, DE
19898, (800) 441-7515

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Significant change from previous version is denoted with a double bar.