

**DuPont™ Krytox® PFPE Oils**

Version 2.0

Revision Date 04/02/2015

Ref. 150000000934

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 : DuPont™ Krytox® PFPE Oils  
Product Grade/Type : GPL: 100, 101, 102, 103, 104, 105, 106, 107, 107-500  
VPF: 1506, 1514, 1520, 1525, 1525S, 1531, 1531E, 1618, 1645, 16256,  
16350  
CBF: 100A, 100B, 103B  
GBO: 14, 25  
XHT- : 500, 750, 1000  
FG 40  
AUT 1045  
4442, 4402, TFO, TLC, NBF140  
TLF 8996  
KDP-4885  
Krytox ESP 250C  
Krytox SKY188  
Zonyl 1045

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Product Use : Lubricant, For professional users only.

Restrictions on use : Do not use product for anything outside of the above specified uses  
Manufacturer/Supplier : Ratermann Manufacturing, Inc.  
601 Pinnacle Place  
Livermore, CA 94550  
United States of America

Product Information : 1-800-264-7793  
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**

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

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**Other hazards**

The product as such is not hazardous., Inhalation of decomposition products from overheating may cause lung irritation or shortness of breath.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

**SECTION 4. FIRST AID MEASURES**

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
- Skin contact : Wash with water and soap as a precaution.
- Eye contact : Rinse with plenty of water. If eye irritation persists, consult a specialist.
- 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.
- Most important symptoms/effects, acute and delayed : No applicable data available.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : No applicable data available.

**SECTION 5. FIREFIGHTING MEASURES**

- 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.

Unsuitable extinguishing media : No applicable data available.

Specific hazards : In fire conditions, toxic decomposition products may be formed. (see also section 10)

Special protective equipment for firefighters : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.

Further information : 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) : No applicable data available.

Environmental precautions : Prevent material from entering sewers, waterways, or low areas.

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

Accidental Release Measures : No applicable data available.

**SECTION 7. HANDLING AND STORAGE**

Handling (Personnel) : Avoid breathing vapors from overheated material.  
General industrial hygiene practice.

Handling (Physical Aspects) : No applicable data available.

Dust explosion class : No applicable data available.

Storage : No special storage conditions required. Keep container closed to prevent contamination.

No decomposition if stored and applied as directed.

Storage period : No applicable data available.

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Storage temperature : No applicable data available.

**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.

Hand protection : Additional protection: No particular glove type is recommended, but nitrile may be 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

Contains no substances with occupational exposure limit values.

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance  
Physical state : liquid  
Form : viscous, liquid  
Color : colourless

Odor : none

Odor threshold : No applicable data available.

pH : neutral

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Melting point/freezing point	: pour point < -5 °C (23 °F)
Boiling point/boiling range	: No applicable data available.
Flash point	: Method: Pensky-Martens closed cup - PMCC does not flash
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Specific gravity (Relative density)	: ca. 1.86 - 1.91 at 24 °C (75 °F)
Water solubility	: insoluble
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: ca.350 °C
Viscosity, kinematic	: No applicable data available.
Viscosity	: No applicable data available.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable at normal ambient temperature and pressure.
Chemical stability	: Stable under normal conditions.

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Possibility of hazardous reactions : Decomposes on heating.  
Conditions to avoid : Decomposition temperature 350 °C (662 °F)  
Incompatible materials : No applicable data available.  
Hazardous decomposition products : Hazardous thermal decomposition products:  
Fluorinated compounds

**SECTION 11. TOXICOLOGICAL INFORMATION****Carcinogenicity**

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

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 12. ECOLOGICAL INFORMATION****SECTION 13. DISPOSAL CONSIDERATIONS**

Waste disposal methods - Product : In accordance with local and national regulations.  
Contaminated packaging : Dispose of container properly.  
If recycling is not practicable, dispose of in compliance with local regulations.

**SECTION 14. TRANSPORT INFORMATION**



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Not classified as dangerous in the meaning of transport regulations.

**SECTION 15. REGULATORY INFORMATION**

TSCA : 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 and DuPont CAUTION Regarding Medical Applications.

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Contact: Ratermann Manufacturing, Inc.  
601 Pinnacle Place  
Livermore, CA 94550  
800-264-7793

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