

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont 1 Page Material Safety Data Sheet "Krytox" 1500XP Series Fluorinated Vacuum Pump Fluids/Oils Revised 7-MAR-2005 10169PP CHEMICAL PRODUCT/COMPANY IDENTIFICATION Material Identification "Krytox" is a registered trademark of DuPont. # Tradenames and Synonyms "Krytox" 1506XP "Krytox" 1514XP "Krytox" 1525XP "Krytox" 1531XP "Krytox" 1506XP RG "Krytox" 1514XP RG "Krytox" 1525XP RG "Krytox" 1531XP RG Company Identification MANUFACTURER/DISTRIBUTOR DuPont 1007 Market Street Wilmington, DE 19898 PHONE NUMBERS Product Information: 1-800-441-7515 (outside the U.S. 302-774-1000) Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S. 703-527-3887) : 1-800-441-3637 (outside the U.S. Medical Emergency 302-774-1000) \_\_\_\_\_\_ COMPOSITION/INFORMATION ON INGREDIENTS Components Material CAS Number Perfluoroalkylether 60164-51-4 90-98 NJ Trade Secret Registry # 00850201001-5618P 2-10 -----HAZARDS IDENTIFICATION \_\_\_\_\_\_ Potential Health Effects

Skin contact may cause reddening of the skin. Perfluoroalkylether was not a skin irritant or skin sensitizer in a 100 person human patch test.

Based on data from animal tests, eye contact may cause eye

## Material Safety Data Sheet

### (HAZARDS IDENTIFICATION - Continued)

irritation with discomfort, tearing, or blurring of vision.

Inhalation of fluorine containing compounds released as decomposition products from overheated or burning product may cause lung irritation and pulmonary edema which require medical treatment. Inhalation of fumes or smoke from overheated or burning grease may cause polymer fume fever, a temporary flu-like illness accompanied by fever, chills, and sometimes cough, of approximately 24 hours duration. Repeated episodes of polymer fume fever may cause lung damage.

Carcinogenicity Information

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

\_\_\_\_\_\_

### FIRST AID MEASURES

-----

### First Aid

#### INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

#### SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.

#### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

### INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

### Notes to Physicians

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

10169PP DuPont Page 3

### Material Safety Data Sheet

-----

FIRE FIGHTING MEASURES

------

Flammable Properties

Flash Point : None Method : TCC

Non-combustible.

Extinguishing Media

Use media appropriate for surrounding material.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment.

Decomposition at flame temperatures may form toxic fluorine compounds. Avoid breathing decomposition products.

\_\_\_\_\_

ACCIDENTAL RELEASE MEASURES

------

Safeguards (Personnel)

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

Accidental Release Measures

Place in container for disposal. Remove source of heat and flame.

------

HANDLING AND STORAGE

------

Handling (Personnel)

Avoid contact with eyes. Avoid contact with skin. Wash thoroughly after handling. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Storage

Keep container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Keep away from heat and flames to avoid decomposition products.

10169PP DuPont Page 4

### Material Safety Data Sheet

-----

EXPOSURE CONTROLS/PERSONAL PROTECTION

-----

Engineering Controls

Keep container tightly closed.

Keep away from heat and flames.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses or coverall chemical splash goggles.

RESPIRATORS

Wear NIOSH approved respiratory protection, as appropriate.

PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.

Exposure Guidelines

Exposure Limits

"Krytox" 1500XP Series Fluorinated Vacuum Pump Fluids/Oils

PEL (OSHA) : None Established
TLV (ACGIH) : None Established

-----

PHYSICAL AND CHEMICAL PROPERTIES

-----

Physical Data

pH : Neutral
Odor : Odorless
Form : Oil
Color : Clear
Specific Gravity : 1.9

-----

STABILITY AND REACTIVITY

-----

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

# Material Safety Data Sheet

(STABILITY AND REACTIVITY - Continued)

### Decomposition

Heating above 260-290 degC (500-554 degF) may form potentially toxic fluorine compounds. Depolymerization may occur in the presence of some metal oxides at temperatures above 288 degC (550 degF). Decomposition occurs at increasing rates as temperature is raised above 355 degC (670 degF).

Polymerization

Polymerization will not occur.

-----

#### TOXICOLOGICAL INFORMATION

-----

Animal Data

Perfluoroalkylether:

Inhalation 4 hour ALC: >19.54 mg/L in rats Skin Absorption ALD: >17,000 mg/kg in rabbits Oral ALD: >25,000 mg/kg in rats

Perfluoroalkylether is a mild skin and eye irritant, but is not a skin sensitizer in tests on animals. A single inhalation exposure produced nonspecific effects such as respiratory irritation. Exposure to thermal decomposition products produced irritation, irregular respiration, tremors and increased liver weight. Repeated inhalation exposures to 10, 100, or 1000 mg/m3 caused increased lung weights and microscopic particle-laden macrophages in the lungs and lymphs nodes; this was an expected pulmonary response to high aerosol concentrations of an inert material. No animal test reports are available to define carcinogenic, developmental, or reproductive hazards. Tests have shown that Perfluoroalkylether did not cause genetic damage in bacterial cell cultures.

\_\_\_\_\_\_

## DISPOSAL CONSIDERATIONS

-----

# Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

10169PP DuPont Page 6

### Material Safety Data Sheet

-----

TRANSPORTATION INFORMATION

-----

Shipping Information

Not Regulated as a hazardous material by DOT, IMO, or IATA.

-----

REGULATORY INFORMATION

\_\_\_\_\_\_

U.S. Federal Regulations

TSCA Inventory Status : Listed.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes Chronic : No Fire : No Reactivity : No Pressure : No

-----

OTHER INFORMATION

\_\_\_\_\_

NFPA, NPCA-HMIS

NPCA-HMIS Rating

Health : 1 Flammability : 0 Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

-----

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS: MSDS Coordinator

DuPont Chemical Solutions Enterprise

Address : Wilmington, De. 19898

Telephone : 800-441-7515

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS