



WHITE CAPPED STANDARD

## MATERIAL SAFETY DATA SHEET

### SECTION 1. PRODUCT IDENTIFICATION AND COMPOSITION

**Name:** White Standard

CAS Number

138495-42-8

Formula

1,1,1,2,3,4,4,5,5,5-decafluoropentane

Percentage

100%

### SECTION 2. SYNONYMS, TRADE NAMES

Vertrel XF (repackaged by Spectrex Corporation)

### SECTION 3. HAZARDS IDENTIFICATION

Colorless liquid Slight odor Ether. This product is not flammable. May irritate eyes and skin. Gas or vapor displaces oxygen available for breathing (asphyxiant). No specific ventilation requirements noted. except this product must not be used in a confined space without good ventilation. Keep out of the reach of children.

#### ENVIRONMENT

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

#### PHYSICAL AND CHEMICAL HAZARDS

Vapors are heavier than air and may travel along the floor and in the bottom of containers. Gas or vapor displaces oxygen available for breathing (asphyxiant).

#### HUMAN HEALTH

Prolonged skin contact may cause redness, irritation and dry skin. Mild dermatitis. allergic skin rash.

### SECTION 4. FIRST AID MEASURES

#### INHALATION

Vapors may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

#### INGESTION

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

#### SKIN CONTACT

Acts as a defatting agent on skin. May cause cracking of skin. and eczema.

#### EYE CONTACT

May cause temporary eye irritation.

#### MEDICAL SYMPTOMS

High concentrations of vapors may irritate respiratory system and lead to headache. fatigue, nausea and vomiting.

## **SECTION 5. FIRE FIGHTING MEASURES**

### **EXTINGUISHING MEDIA**

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

### **SPECIAL FIRE FIGHTING PROCEDURES**

Containers close to fire should be removed immediately or cooled with water.

### **UNUSUAL FIRE & EXPLOSION HAZARDS**

Closed containers can burst violently when heated due to excess pressure build-up.

### **SPECIFIC HAZARDS**

Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

### **PROTECTIVE MEASURES IN FIRE**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

**FLAMMABILITY LIMIT** - LOWER(%) Not Flammable

**FLAMMABILITY LIMIT** - UPPER(%) Not Flammable

### **FLAMMABILITY CLASS**

This product is not flammable. TCC (Tag closed cup)

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **PERSONAL PRECAUTIONS**

Warn everybody of potential hazards and evacuate if necessary. Ventilate well. avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

### **ENVIRONMENTAL PRECAUTIONS**

Contain spillages with sand, earth or any suitable adsorbent material. Avoid release to the environment.

### **SPILL CLEAN UP METHODS**

Large quantities should not be discharged into the drain but removed with absorbing material. Dam and absorb spillages with sand earth or other non-combustible material. Collect spillage with shovel, broom or the like and reuse if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

## **SECTION 7. HANDLING AND STORAGE**

### **HANDLING**

Provide good ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Keep out of the reach of children.

### **STORAGE**

Store in tightly closed original container in a dry, cool and well-ventilated place.

### **STORAGE CLASS**

Unspecified storage. This product is not flammable.

## **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **ENGINEERING MEASURES**

No specific ventilation requirements noted except this product must not be used in a confined space without good ventilation.

## RESPIRATORY EQUIPMENT

Vapors are heavier than air and may travel along the floor and in the bottom of containers. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Self-contained breathing apparatus with full face piece.

## HAND PROTECTION

For prolonged or repeated skin contact use suitable protective gloves.

## EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable. If risk of splashing, wear safety goggles or face shield.

## OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination.

## HYGIENE MEASURES

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. When using do not eat, drink or smoke

## SKIN PROTECTION

Wear apron or protective clothing in case of splashes.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid
COLOR	Water-white
ODOR	Slight odor Ether.
VOLATILITY DESCRIPTION	Volatile
SOLUBILITY	Insoluble in water
BOILING POINT (°C)	55 C / 130 F
VAPOR DENSITY (air=1)	4
VAPOR PRESSURE	226 mm Hg 25 C / 77 F
VOLATILE BY VOL. (%)	100
DECOMPOSITION TEMPERATURE	
>1000 C (°C)	

## SECTION 10. STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions and recommended use.

### CONDITIONS TO AVOID

Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

### HAZARDOUS POLYMERISATION

Will not polymerise.

### MATERIALS TO AVOID

Alkali metals. Alkali earth metals. Powdered metal.

## HAZARDOUS DECOMPOSITION PRODUCTS

When heated, toxic and corrosive vapours/gases may be formed. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

## SECTION 11. TOXICOLOGICAL INFORMATION

Toxic Dose 1 - LD 50 >5,000 mg/kg (oral rat)

Toxic Conc. - LC 50 11,100 ppm/4h (inh-rat)

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnies.

LC 50, 96 Hrs, Fish mg/f 27.2

IC 50, 72 Hrs, Algae, mg)1 120

### Bio-Accumulative Potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product Degradability

The product is not expected to be biodegradable.

## SECTION 13. DISPOSAL CONSIDERATIONS

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14. TRANSPORTATION INFORMATION

Not regulated. The product is not covered by international regulation on the transport of dangerous goods (IMDG, 1ATA, DOT).

No transport warning sign required.

## SECTION 15. REGULATORY INFORMATION

SARA (311/312) HAZARD

CATEGORIES Acute

REGULATORY STATUS (US)

SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard). NFPA30 Flammable and Combustible Liquids Code.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY



Materials Causing  
Other Toxic Effects\_

#### CONTROLLED PRODUCT CLASSIFICATION

Canadian WHMIS Classification D2 WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

#### **SECTION 16. OTHER INFORMATION**

No additional information.

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

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