Fluoryx Labs

Safety Data Sheet

FC13-6500

1H,1H,5H-Octafluoropentyl-1,1,2,2-Tetrafluoroethyl Ether

Revised 20-July-2022

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product number:	FC13-6500
Chemical name:	*1H,1H,5H*-Octafluoropentyl-1,1,2,2-tetrafluoroethyl ether
Synonym:	HFE-6512

Company Identification

Distributor:	**Fluoryx Labs** 3650 Research Way, #22 Carson City, NV 89706 USA
Emergency call:	+01-813-248-0585 (International) +1-800-255-3924 (USA)

2. HAZARDS IDENTIFICATION

Emergency Overview:

Classification of the substance or mixture: Irritating to eyes, respiratory system and skin.

Label elements

Pictogram	
Signal word	Irritant
Hazard statement(s)	H316: Causes mild skin irritation H320: Causes eye irritation H335: May cause respiratory irritation
Precautionary statement(s)	P262: Do not get in eyes, on skin, or on clothing
Hazard symbol(s)	Xi, irritant
R-phrase(s)	R36: Irritating to eyes R37: Irritating to respiratory system R38: Irritating to skin
Other hazard(s)	None

Potential Health Effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.

3. COMPOSITION AND INFORMATION ON COMPONENTS

Chemical Formula: $HCF_2CF_2CF_2CF_2CH_2OCF_2CF_2H$
$C_7H_4F_{12}O$

Molecular Weight 332.09 g/mol

Material	TSCA Listed	CAS #	EINECS #
1H,1H,5H-Octafluoropentyl-1,1,2,2-tetrafluoroethyl ether	No	16627-71-7	None

4. FIRST AID MEASURES

General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

Flash Point: None

Extinguishing Medias: Carbon dioxide, dry chemical powder, alcohol or polymer foam. Do not use water as extinguishing media.

Specific Hazards: Emits toxic fumes under fire conditions including carbon monoxide, hydrogen fluoride and fluorophosgene.

Protection of Fire Fighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate respirator, rubber boots and heavy rubber gloves. If there is skin contact with the chemical, wash immediately with plenty of water. Absorb on sand or vermiculite and place in closed containers for disposal.

Environmental Precautions: Do not discharge into drains or rivers. Contain the spillage.

Cleanup Procedures: Absorb on sand or vermiculite and place in closed containers for disposal. Scoop up and place in and appropriate container. Ventilate area and wash

spill site after pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid prolonged exposure. Avoid all direct contact with material. Wash thoroughly after handling. Do not breathe vapor. Have safely shower and eye wash available. Do not get in eyes, on skin, or on clothing.

Conditions for Safe Storage: Store in cool, well-ventilated area. Keep container tightly closed. Keep away from sources of ignition. Avoid contact with water or humidity.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limit Values: None listed.

Authorized Limit Values: None listed.

Exposure Controls: Follow the protective measures given in Section 7.

Provide premise ventilation.

Respect local, state, and national regulations for aqueous emissions.

Occupational Exposure Controls:

Ventilation: Use only in a chemical fume hood.

Follow the protective measures given in section 7.

Ensure there is sufficient ventilation of the area.

Respect local, state and national regulations for aqueous emissions.

Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Safety goggles. Ensure eye wash at hand.

Skin protection: Impermeable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid
Color	None
Melting Point	-93 °C
Boiling Point	133 °C @ 760 mm Hg
Decomposition Temperature	No data
Flash Point	None
Explosive Properties	Not determined
Vapor Pressure	8 mm Hg @ 25.5 °C
Oxidizing Properties	Not applicable.
Density	1.626 g/m @ 25 °C
Refractive Index	1.296 @ 20 °C
Solubility	In water at 23°C < 20 ppm. Fat: No data.
Ozone Depletion Potential	0
Vapor Density (Air = 1)	4.55
Viscosity	2.2 CP @ 25 °C

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable at normal temperatures and storage conditions.
Possibility of Hazardous Reactions:	No data available
Conditions to Avoid:	Heat/sources of heat.
Materials to Avoid:	Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products:	May evolve carbon dioxide, carbon monoxide, and hydrogen fluoride and fluorophosgene.
Hazardous Polymerization:	Will not occur.
Other Information:	The vapor is heavier than air and disperses at ground level and displaces oxygen.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50	no data available
Inhalation LC50	> 10 mg/L (2h), static inhalation, rat. No fatalities up to 10 mg/L for 2 hours.
Dermal LD50	No data available
Other information on acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	no data available
Teratogenicity	no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)	Inhalation - May cause respiratory irritation.
Specific target organ toxicity - repeated exposure (Globally Harmonized System)	no data available
Aspiration hazard	no data available

Potential health effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic effects	no data available
Additional Information	
RTECS	Not available

12. ECOLOGICAL INFORMATION

Acute Ecotoxicity:	No data.
Chronic Ecotoxicity:	No data.
Degradation	
Abiotic:	
Air, photolysis:	Ozone Depletion Potential: ODP = 0 Reference value for CFC 11: ODP = 1.
Air, greenhouse effect:	No data. Reference value for carbon dioxide: GWP = 1
Biotic:	No data.
Potential for bioaccumulation:	No data.

13. DISPOSAL CONSIDERATIONS

Waste Treatment:	Arrange disposal as special waste, by licensed disposal company. It is recommended to contact the producer for recycling recovery.
Packaging Treatment:	Arrange for collection by specialized disposal company.
RCRA Hazardous Waste:	Not available

14. TRANSPORT INFORMATION

Shipping Information:	Not regulated as a hazardous material by DOT, IMO, or IATA.
DOT Proper Shipping Name:	None. Non-hazardous for transport.
UN Number:	None. Non-hazardous for transport.

15. REGULATORY INFORMATION

OSHA Hazards	Irritant
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section

302.

SARA 313 Components — This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards — Acute Health Hazard

Massachusetts Right To Know Components — No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components — No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right To Know Components — No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Components — This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

National Regulations (US)
TSCA Inventory 8(b): No.

16. OTHER INFORMATION

HMIS Classification

Health hazard :	1
Flammability :	0
Physical hazards :	0

NFPA Rating

Health hazard :	1
Fire :	0
Reactivity Hazard :	0

Legal Disclaimer: For R&D use only. Not for drug, household, or other uses. The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. Unless noted to the contrary, the technical information applies only to pure product.

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End of SDS