

FC04-05E

2-Perfluoropropoxy-2,3,3,3-Tetrafluoropropanol

Revised 19-November-2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name	2-Perfluoropropoxy-2,3,3,3-tetrafluoropropanol
Catalog Number	FC04-05E
Brand	Fluoryx Labs
CAS Number	26537-88-2

Relevant identified uses of the Substance or mixture and uses advised against

Identified uses:	Laboratory chemicals. Manufacture of substances.
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Details of the supplier of the safety data sheet

Company	Fluoryx Labs 3650 Research Way, #22 Carson City, NV 89706 USA +1 (510) 329-9149 (Telephone) +1 (510) 686-8799 (Fax) www.fluoryx.com
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Emergency call (Chemtel):


+01-813-248-0585 (International)
+1-800-255-3924 (USA)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (Category 2), H315
 Eye irritation (Category 2A), H319
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning

Hazard statement(s)

H315:	Causes skin irritation.
H319:	Causes serious eye irritation.
H335:	May cause respiratory irritation

Precautionary statement(s)

P264:	Wash hands thoroughly after handling.
P302 + P352:	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313:

If skin irritation occurs: Get medical advice/attention.

P337 + P313:

If eye irritation persists: Get medical advice/attention.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms

1H,1H-Perfluoro(2-methyl-3-oxahexan-1-ol)
 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propan-1-ol
 2-Heptafluoropropoxy-2,3,3,3-tetrafluoropropan-1-ol
 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propan-1-ol
 2-Perfluoropropoxy-2,3,3,3-tetrafluoropropanol
 1H,1H-Undecafluoro(2-methyl-3-oxahexan-1-ol)

Chemical formula

$C_6H_3F_{11}O_2$
 $F(CF_2)_3OCF(CF_3)CH_2OH$

Molecular weight

316.07

CAS number

26537-88-2

EC number

None

Hazardous components

Material	Classification	Concentration
2-Perfluoropropoxy-2,3,3,3-tetrafluoropropanol	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	≤100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

Take off contaminated clothing and shoes immediately. 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. Consult a physician.

If swallowed

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

Most important symptoms and effects, both acute and delayed - The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed - no data available

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective clothing for fire fighting.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid inhalation of vapor, mist, dust, or gas. Ensure adequate ventilation. Vapors can accumulate in low areas. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Mix with sand or vermiculite. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

7. HANDLING AND STORAGE

Precautions for safe handling

Provide appropriate exhaust ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Wash hands immediately after contamination. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government

standards such as NIOSH (US) or CEN (EU).

Control of environmental exposurePrevent further leakage or spillage if safe to do so.
Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Liquid, clear
Color	Colorless

Safety Data

pH	No data available
Melting Point/Freezing Point	No data available
Boiling Point	119 °C @ 760 mm Hg
Flash Point	> 110 °C (closed cup)
Ignition Temperature	No data available
Auto-ignition Temperature	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Thermal Decomposition Temperature	No data available
Vapor Pressure	No data available
Density	1.55 g/mL @ 20 °C
Water Solubility	Negligible
Partition Coefficient (<i>n</i> -octanol/water)	No data available
Relative Vapor Density (Air = 1)	> 1
Odor	No data available
Odor Threshold	No data available
Evaporation Rate	No data available
Oxidizing Properties	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Polymerization will not occur. No other data available.
Conditions to avoid	Keep away from open flames and heated surfaces above 200 °C (392 °F).
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, and carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50	No data available
Inhalation LC50	Rat, 4hr, inhalation: Neural toxicity symptoms at 300 ppm; no deaths at 300 ppm. No effects

Dermal LD50	observed at an inhalation concentration of 100 and 200 ppm for 4 hours.
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 (Globally Harmonized System)	
Single exposure	No data available
Repeated exposure	No data available
Aspiration Hazard	No data available
Signs and Symptoms of Exposure:	No data available
Synergistic Effects	No data available
Additional Information	RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

12. ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and Degradability	Does not readily degrade.
Bioaccumulative Potential	No data available
Mobility in Soil	No data available
PBT and vPvB Assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Product	Offer non-recyclable solutions to a licensed disposal company. Contact Fluoryx Inc. to return unused product.
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Contaminated packaging Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

15. REGULATORY INFORMATION

TSCA Status Not on the inventory.

DSL Status Not listed.

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 No SARA hazards.

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.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritant
STOT SE 3	Specific target organ toxicity - single exposure (Category 3)
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Skin Irrit.	Skin irritation

HMIS Classification

Health hazard	2
Flammability	0
Physical hazards	0

NFPA Rating

Health hazard	2
Fire	0
Reactivity Hazard	0

Further information

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