

FC13-TTEF

5H-Octafluoro-3-Oxapentanesulfonyl Fluoride

Revised 27-November-2022

1. PRODUCT AND COMPANY IDENTIFICATION


Product Name	5H-Octafluoro-3-oxapentanesulfonyl fluoride
Catalog Number	FC13-TTEF
CAS Number	104729-49-9
Supplier	Fluoryx Labs 3650 Research Way, #22 Carson City, NV 89706 USA
Emergency call (VelocityEHS):	+01-813-248-0585 (International) +1-800-255-3924 (USA)

2. HAZARDS INFORMATION

Emergency Overview

OSHA Hazards	No known OSHA hazards
GHS Classification	Skin irritation, H315 Eye irritation, H319 Respiratory irritation, H335

GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H315: Causes skin irritation. H320: Causes 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.

Hazards not otherwise classified (HNOC) or not covered by GHS

Inhalation of decomposition products from overheating may cause lung irritation or shortness of breath.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms	1,1,2,2-Tetrafluoro-2-(1,1,2,2-tetrafluoroethoxy)ethanesulfonyl fluoride
Chemical formula	FSO ₂ CF ₂ CF ₂ OCF ₂ CF ₂ H
Molecular weight	C ₄ HF ₉ O ₃ S
Components	300.1 g/mol

Material	Concentration	CAS #	EC #	TSCA
5H-Octafluoro-3-oxapentanesulfonyl fluoride	≤ 100%	104729-49-9	None	Not listed

4. FIRST AID MEASURES

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.
In case of eye contact	Flush eyes with water for 15 minutes. Consult a physician
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment, such as: carbon dioxide, dry chemical powder, water. Do not use water with a full water jet.
Special protective equipment for firefighters	Wear self-contained breathing apparatus for fire fighting.
Hazardous combustion products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, sulfur oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear personal protective equipment. Avoid contact with the skin and the eyes. Ensure adequate ventilation. Avoid inhalation of vapor, mist, dust, or gas.
Environmental precautions	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, labeled salvage container for disposal by an appropriate method

7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire
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protection.

Conditions for Safe Storage

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

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and 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.

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Liquid
Color	Colorless

Safety Data

pH	7
Melting Point/Freezing Point	No data available
Boiling Point	130-131 °C @ 760 mm Hg
Flash Point	No data available
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	1.415 g/mL @ 20 °C
Water Solubility	Slightly soluble
Partition Coefficient (<i>n</i> -octanol/water)	No data available
Relative Vapor Density (Air = 1)	> 1
Odor	Ether-like

Odor Threshold	No data available
Evaporation Rate	No data available
Refractive index	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

Storage stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Polymerization will not occur.
Conditions to avoid	Keep away from open flames and heated surfaces above 300 °C.
Materials to avoid	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50	No data available
Inhalation LC50	No data available
Dermal LD50	No data available
Other information on acute toxicity	No data available
Skin corrosion/irritation	Irritating to skin and mucous membranes.
Serious eye damage/eye irritation	Irritant effect.
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
Specific target organ toxicity (Globally Harmonized System)	
Single exposure	No data available
Repeated exposure	No data available
Aspiration Hazard	No data available
Potential Health Effects	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause

Eyes	skin irritation.
Ingestion	May cause eye irritation. May be harmful if swallowed.
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	No data available
12. ECOLOGICAL INFORMATION	
Toxicity	No data available
Persistence and Degradability	No data available
Bioaccumulative Potential	No data available
Mobility in Soil	No data available
PBT and vPvB Assessment	No data available
Other adverse effects	No data available
13. DISPOSAL CONSIDERATIONS	
Product	Offer non-recyclable solutions to a licensed disposal company. Contact Fluoryx Labs to return unused product.
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	
OSHA Hazards	No known OSHA hazards.
TSCA Status	Not listed.
DSL Status	This product does not contain components listed on the Canadian NDSL list.
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

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 MSDS