

FC16-T10Limonene

Perfluorodecyl-Limonene

Revised 07-February-2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product name	Perfluorodecyl-limonene
Catalog number	FC16-T10Limonene
Brand	Fluoryx Labs
CAS number	1346521-37-6

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified uses	Laboratory chemicals. Synthesis 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 3), H316
 Eye irritation (Category 3), H320
 Specific target organ toxicity – single exposure (Category 3), respiratory system, H335

GHS Label Elements, Including Precautionary Statements

Pictogram	GHS07: Exclamation mark
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Signal Word	Warning
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Hazard statement(s)	Causes mild skin irritation. Causes eye irritation. May cause respiratory irritation.
H316	
H320	
H335	

Precautionary statement(s)	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash skin thoroughly after handling.
P261	
P264	

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/eye protection/face protection.
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.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS - none

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms 4-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluorotridecan-2-yl)-1-methylcyclohex-1-ene

Formula

C₂₀H₁₇F₂₁



Molecular Weight

656.32 g/mol

CAS Number

None

EC Number

None

Hazardous Components

Component	Classification	Concentration
Perfluorodecyl-limonene	Skin Irrit. 3; Eye Irrit. 3; STOT SE 3; H316, H320, H335	≤100%

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

4. FIRST AID MEASURES

Description of 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	Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. Consult a doctor.

If swallowed

Never give anything by mouth to an unconscious person. 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

Indications of Any Immediate Medical Attention No data available.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

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

Special Hazards Arising from the Substance

Hazardous decomposition products formed under fire conditions - carbon oxides and hydrogen fluoride (HF).

Advice for Firefighters

Wear self contained breathing apparatus for fire fighting.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid breathing vapors, mist or dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions

Do not let product enter drains.

Methods for Cleaning Up

Sweep or shovel up without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid formation of dust, mist or respirable particles. Provide appropriate exhaust ventilation at places where dust, mist or vapors are formed. Normal measures for preventive fire protection. Keep away from open flames and heated surfaces above 200 °C (392 °F).

Conditions for Safe Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific End Use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with Workplace Control Parameters Contains no substances with occupational exposure limit values.

Engineering Controls

Do not create dust, aerosolize, or spray. Prevent leaks in high-pressure systems that could create fine mists.

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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Slushy solid at 20 °C
 Color Yellowish

Safety Data

pH No data available
 Melting point/freezing point 6-37 °C
 Boiling point No data available
 Flash point > 100 °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 > 200 °C
 Vapor pressure No data available
 Density No data available
 Water solubility Negligible
 Partition coefficient (*n*-octanol/water) No data available
 Relative vapor density (air = 1) > 1
 Odor Wax-like; lemon
 Odor threshold No data available
 Evaporation rate No data available
 Viscosity No data available
 Oxidizing properties No data available

10. STABILITY AND REACTIVITY

Reactivity No data available
Chemical Stability Stable under recommended storage conditions.
Possibility of Hazardous Reactions: No data available.

Conditions to Avoid	Keep away from open flames and heated surfaces above 200 °C (392 °F).
Incompatible Materials	Avoid strong oxidizing agents and strong bases.
Hazardous Decomposition Products	Decomposition temperature > 200 °C. Hazardous decomposition products formed under fire conditions - carbon oxides and hydrogen fluoride (HF).

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	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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Reproductive Toxicity	No data available
Specific Target Organ Toxicity (Globally Harmonized System)	
Single exposure	Inhalation – may cause respiratory irritation
Repeated exposure	No data available
Aspiration Hazard	No data available
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: none

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	No data available

Other adverse effects No data available

13. DISPOSAL CONSIDERATIONS

Product Offer non-recyclable solutions to a licensed disposal company or contact Fluoryx 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

TSCA Status Not on the inventory.

DSL Status Not 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 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.

16. OTHER INFORMATION

Full Text of H-Statements Referred to Under Sections 2 and 3.

Eye Irrit.	Eye irritation.
H316	Causes mild skin irritation.
H320	Causes eye irritation.
H335	May cause respiratory irritation.
Skin Irrit.	Skin irritation.
STOT SE	Specific target organ toxicity - single exposure.

HMIS Rating

Health hazard	1
Flammability	0
Physical hazards	0

NFPA Rating

Health hazard	1
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