

FC19-PDDNA

Perfluoro-2,5-Dimethyl-3,6-Dioxanonanoic Acid

Revised 09-June-2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product name	Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid
Catalog number	FC19-PDDNA
Brand	Fluoryx Labs
CAS number	13252-14-7

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

Identified uses	Laboratory chemicals.
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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 www.fluoryx.com
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Emergency Call (VelocityEHS)

+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 Corr. 1B	H314 - Causes severe skin burns and eye damage
Eye Dam. 1	H318 - Causes serious eye damage
STOT SE 3	H335 - May cause respiratory irritation

Full text of H-phrases: see section 16

GHS Label Elements, Including Precautionary Statements

Pictogram



Signal Word Danger

Hazard statement(s) GHS-US

H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H335 - May cause respiratory irritation

Precautionary statement(s)

P260 - Do not breathe dust, mist, spray

- P264 - Wash skin thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
- P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304+P340 - If inhaled: Remove person to fresh air and keep 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
- P310 - Immediately call a POISON CENTER or doctor/ physician
- P321 - Specific treatment (see supplemental first aid instructions on this label)
- P363 - Wash contaminated clothing 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

No additional information available

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms	2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]propanoic acid
Formula	C ₉ HF ₁₇ O ₄
Molecular Weight	496.08 g/mol
CAS Number	13252-14-7
EC Number	None

Hazardous Components

Component	Classification (GHS-US)	Concentration
Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid	Skin Corr. 1B H314. Eye Dam. 1, H318. STOT SE 3, 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	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.
If inhaled	Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.
In case of skin contact	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Get immediate medical advice/attention.
In case of eye contact	Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get immediate medical advice/attention.

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 Material is destructive to tissue of the mucuous membranes and upper respiratory tract. Cough, shortness of breath, headache, nausea. Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.

Special Hazards Arising from the Substance

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

Advice for Firefighters

Wear gas tight chemically protective clothing in combination with self-contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".

Further Information

No data available.

6. ACCIDENTAL RELEASE MEASURES

General Measures

Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fumes, vapor or spray.

Personal Precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

Environmental Precautions

Do not let product enter drains or waterways.

Methods for Cleaning Up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from open flames and heated surfaces above 180 °C (356 °F).

Conditions for Safe Storage

Hygroscopic. Store in cool, dry 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. Moisture sensitive. Keep contents under dry inert gas.

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	Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal Protective Equipment	
Eye/face protection	Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.
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	In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection.
Control of Environmental Exposure	Do not let product enter drains or waterways.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Clear liquid
Color	Colorless

Safety Data

pH	No data available
Melting point/freezing point	No data available
Boiling point	135 °C @ 28 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	1.738 @ 20 °C
Water solubility	Soluble
Partition coefficient (<i>n</i> -octanol/water)	No data available
Relative vapor density (air = 1)	No data available
Odor	No data available
Odor threshold	No data available
Evaporation rate	No data available
Oxidizing properties	Non-oxidizing

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable in sealed containers.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	Keep away from open flames and heated surfaces above 180 °C (356 °F).
Incompatible Materials	Bases. Strong oxidizing agents.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

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	May cause eye irritation
Respiratory or Skin Sensitization	May cause respiratory irritation
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
Signs and Symptoms of Exposure	After inhalation, material is destructive to tissue of the mucous membranes and upper respiratory tract. Cough, shortness of breath, headache, nausea.
Synergistic Effects	No data available
Additional Information	RTECS: none

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 or contact Fluoryx to return unused product. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.
Contaminated Packaging	Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)	UN3265: Corrosive liquid, acidic, organic, n.o.s., Class 8, packing group III DOT packaging non-bulk: 203
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IATA	UN 3265: Corrosive liquid, acidic, organic, n.o.s., Class 8, packing group III
IMDG	UN 3265: Corrosive liquid, acidic, organic, n.o.s., Class 8, packing group III

15. REGULATORY INFORMATION

TSCA Status	Not listed on the inventory.
DSL Status	No additional information available.
IECSC	No additional information available.
ISHL	No additional information available.
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	Corrosive.
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-phrases:

- None Eye Dam. 1 Serious eye damage/eye irritation Category 1
- Skin Corr. 1B Skin corrosion/irritation Category 1B
- STOT SE 3 Specific target organ toxicity (single exposure) Category 3
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H335 May cause respiratory irritation

HMIS Rating

Health hazard	3
Flammability	1
Physical hazards	0

NFPA Rating

Health hazard	3
Fire	1
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