

FC05-04

2-(Perfluorobutyl)Ethyl Acrylate

Revised 16-November-2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name	2-(Perfluorobutyl)ethyl acrylate
Catalog Number	FC05-04
Brand	Fluoryx Labs
CAS no.	52591-27-2

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:

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

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Irritant (category 4)

GHS Label elements, including precautionary statements

Pictogram



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
R-phrases)	R36: Irritating to eyes R37: Irritating to respiratory system R38: Irritating to skin
Other hazard(s)	None

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms

1H,1H,2H,2H-Nonafluorohexyl-1-acrylate;

Acrylic Acid 1H,1H,2H,2H-Nonafluorohexyl ester;
 Acrylic Acid 3,3,4,4,5,5,6,6,6-Nonafluorohexyl ester;
 3,3,4,4,5,5,6,6,6-Nonafluorohexyl Acrylate;
 Daikin R-1420;
 1H,1H,2H,2H-Perfluorohexyl acrylate;
 Propenoic acid 3,3,4,4,5,5,6,6,6-nonafluorohexyl ester

Molecular weight: 318.14 g/mol

Chemical formula: CH₂=CHC(O)OCH₂CH₂(CF₂CF₂)₂F
 C₉H₇F₉O₂

CAS No. 52591-27-2

EC No. 204-881-4

No ingredients are hazardous according to relevant criteria.

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.

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. FIRE FIGHTING MEASURES

Flammable Properties Flash point:	None below the boil (closed cup)
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.
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 breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	Do not let product enter drains.
Methods and materials for containment and	

cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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 protection.

Conditions for safe storage 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.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters Contains no substances with occupational exposure limit values.

Personal protective equipment

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).

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Form	Clear
Color	Colorless
pH	No data available
Boiling Point	160 °C @ 760 mm Hg
Melting Point	- 68 °C
Density	1.44 g/mL @ 25 °C

Flash Point	>100 °C (closed cup)
Auto ignition temperature	No data available
Decomposition temperature	No data available
Explosive properties	No data available
Vapor pressure	No data available
Vapor density	> 1 (air = 1)
Oxidative properties	No data available
Solubility in Water	Negligible

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to Avoid:	Extremes in temperature and sunlight.
Materials to Avoid:	Strong oxidizing agents.
Hazardous Decomposition Products:	In combustion, emits toxic fumes including carbon monoxide, carbon dioxide, and hydrogen fluoride.
Hazardous Polymerization Reactions:	Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to bulk liquid if needed.

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	
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. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause 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

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	Material should be disposed of in accordance with local, state and federal regulations. 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. TRANSPORTATION INFORMATION

OSHA Hazards	No known OSHA hazards
TSCA Inventory	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 Massachusetts Right to Know Act.

New Jersey Right To Know Components

No components are subject to the Massachusetts 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

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