

## FC05-N

## 2-(Perfluoroalkyl)ethyl Acrylates (mixture)

Revised 16-November-2016

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**1. PRODUCT AND COMPANY IDENTIFICATION**


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**Product Identifier**

Product Name	2-(Perfluoroalkyl)ethyl acrylates, mixture
Catalog Number	FC05-N
Brand	Fluoryx Labs
CAS no.	65605-70-1

**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	<b>Fluoryx Labs</b> 3650 Research Way, #22 Carson City, NV 89706 USA +1 (510) 329-9149 (Telephone) +1 (510) 686-8799 (Fax) www.fluoryx.com
<b>Emergency call:</b>	+01-813-248-0585 (International) +1-800-255-3924 (USA)

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**2. HAZARDS IDENTIFICATION**


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**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 Statements

H315: causes skin irritation  
 H319: causes serious eye irritation  
 H335: May cause respiratory irritation

Precautionary statements

P261: Avoid breathing dust/fume/gas/mist/  
 vapors/spray  
 P264: Wash skin thoroughly after handling.  
 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/doctor if you feel unwell.

P321: Specific treatment (see supplemental first aid instructions on this label).

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.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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<b>Chemical Formula</b>	CH <sub>2</sub> =CHC(O)OCH <sub>2</sub> CH <sub>2</sub> (CF <sub>2</sub> ) <sub>x</sub> F, x = 8,10,12,...; mostly x = 8 (>60%) C <sub>n</sub> H <sub>7</sub> F <sub>m</sub> O <sub>2</sub> ; n = 9,11,13,15...; m = 2n-9
<b>Molecular Weight</b>	~575 g/mol (average)
<b>CAS No.</b>	65605-70-1
<b>EC no.</b>	None

No components need to be disclosed according to the applicable regulations.

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### 4. FIRST AID MEASURES

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<b>General advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>Oral Exposure:</b>	If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Inhalation Exposure:</b>	If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
<b>Dermal Exposure:</b>	In case of contact, immediately wash skin with soap and copious amounts of water. Consult a physician.
<b>Eye Exposure:</b>	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Consult a physician.

#### **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

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

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**5. FIRE FIGHTING MEASURES**

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<b>Suitable Extinguishing Media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special Protective Equipment for Firefighters:</b>	Wear self-contained breathing apparatus for fire fighting if necessary.
<b>Hazardous Combustion Products:</b>	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride.

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**6. ACCIDENTAL RELEASE MEASURES**

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<b>Personal precautions</b>	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.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Methods for cleaning up</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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**7. HANDLING AND STORAGE**

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<b>Precautions for Safe Handling</b>	Provide appropriate exhaust ventilation at places where dust is formed. Avoid formation of respirable particles. Normal measures for preventive fire protection. User exposure: avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
<b>Storage Conditions:</b>	Keep container tightly closed in a dry and well-ventilated place. Opened containers must be carefully resealed and kept upright to prevent leakage. Store at 2 to 8 °C.

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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**Contains no substances with occupational exposure limit values.**

**Personal Protective Equipment****Respiratory protection**

Use only with adequate ventilation. Vent heated extruder or dryer fumes outside work area. Do not aerosolize. 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.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Form</b>	Clear, liquid to slush
<b>Color</b>	Light yellow
<b>pH</b>	3 to 5 @ 20 °C
<b>Boiling Point</b>	100 to 220 °C (212 to 428 °F) @ 10 mm Hg Approx.
<b>Melting Point</b>	-1 to 25 °C
<b>Vapor Pressure</b>	No data available
<b>Vapor Density (Air = 1)</b>	> 1
<b>Saturated Vapor Conc.</b>	No data available
<b>Density</b>	1.6 g/mL @ 25 °C
<b>Odor</b>	Acrylic
<b>Odor Threshold</b>	No data available
<b>Flash Point</b>	> 110 °C – closed cup
<b>Explosion Limits</b>	No data available
<b>Auto Ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Oxidizing Properties</b>	No data available
<b>Solubility in Water</b>	Negligible

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### 10. STABILITY AND REACTIVITY

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<b>Stability:</b>	Stable at normal temperatures and storage conditions. Air inhibits polymerization.
<b>Conditions to Avoid:</b>	Heat, UV, and light.
<b>Materials to Avoid:</b>	Strong oxidizing agents. Strong acids. Strong bases.
<b>Hazardous Decomposition Products:</b>	In combustion, emits toxic fumes including carbon monoxide, carbon dioxide, and hydrogen fluoride.
<b>Hazardous Polymerization Reactions:</b>	Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to bulk liquid if needed.

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### 11. TOXICOLOGICAL INFORMATION

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<b>Acute toxicity</b>	Oral LD50: no data available Inhalation LC50: no data available Dermal LD50: no data available Other information on acute toxicity: no data available
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory or skin sensitization</b>	The effects in animals exposed by inhalation to single high doses include irregular breathing,

salivation, and discharge from the eyes and nose.  
Not a skin sensitizer in animals.

**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) No data available

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

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**13. DISPOSAL CONSIDERATIONS**

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<b>Product</b>	Offer unused product to Fluoryx. Offer non-recyclable solutions to a licensed disposal company.
<b>Contaminated packaging</b>	Dispose of as unused product.

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**14. TRANSPORTATION INFORMATION**

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<b>DOT (US)</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

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**15. REGULATORY INFORMATION**

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<b>OSHA Hazards</b>	No known OSHA hazards.
<b>TSCA Inventory</b>	Not listed.
<b>DSL Status</b>	This product contains the following components listed on the Canadian NDSL list: Poly(difluoromethylene), $\omega$ -fluoro- $\gamma$ -[2-[(1-oxo-2-propenyl)-oxy]ethyl]- CAS-No. 65605-70-1
<b>SARA 302 Components</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
<b>SARA 313 Components</b>	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.
<b>SARA 311/312 Hazards</b>	Acute hazard.
<b>Massachusetts Right To Know Components</b>	No components are subject to the Massachusetts Right to Know Act.
<b>Pennsylvania Right To Know Components</b>	No components are subject to the Pennsylvania Right To Know Law.
<b>New Jersey Right To Know Components</b>	No components are subject to the New Jersey Right To Know Law
<b>California Prop. 65 Components</b>	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. OTHER INFORMATION**

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<b>HMIS Classification</b>	Health hazard: 1 Flammability: 1 Physical hazards: 0
<b>NFPA Rating</b>	Health hazard: 1 Fire: 1 Reactivity Hazard: 0
<b>Further Information:</b>	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