



# Material Safety Data Sheet

## FC05-12 Perfluorododecyl Ethyl Acrylate

Revised 12-August-2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Material Identification

**Product name:** FC05-12  
**Chemical name:** Perfluorododecyl ethyl acrylate  
*1H, 1H, 2H, 2H-Pentacosafuorotetradecyl-1-acrylate*  
**Chemical formula:**  $\text{CH}_2=\text{CHC}(\text{O})\text{OCH}_2\text{CH}_2(\text{CF}_2\text{CF}_2)_6\text{F}$   
 $\text{C}_{17}\text{H}_{17}\text{F}_{25}\text{O}_2$

#### Company Identification

**Distributor:** Fluoryx, Inc.  
1933 Davis St., Suite 293  
San Leandro, CA 94577  
USA  
**Emergency call:** +86-1346-4812437  
+1-510-329-2811

### 2. COMPOSITION AND INFORMATION ON INGREDIENTS

#### Components

Material	CAS Number	EINECS	TSCA Listed	Amount
2-(Perfluorododecyl) ethyl acrylate	34395-24-9	N/A	N/A	> 97 %
2,6-Di- <i>tert</i> -butyl-4-methylphenol	128-37-0	204-881-4	Yes	30 ppm

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

**Caution:** Irritating to eyes, respiratory system and skin.

For additional information on toxicity, please refer to Section 11.

### 4. FIRST AID MEASURES

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Skin Contact:** Flush skin with water after contact. Wash contaminated clothing before reuse.

**Eye Contact:** In case of contact, immediately flush eyes with plenty

**Ingestion:** of water for at least 15 minutes. Call a physician.  
If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## 5. FIRE FIGHTING MEASURES

### Flammable Properties

**Flash point:** > 110 °C  
**Method:** Closed cup

**Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

**Fire fighting instructions:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Clean-Up Procedures:** Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

**Handling Requirements:** User exposure: do not breathe dust or mist. Avoid contact with eyes, skin, and clothing.

**Storage Conditions:** Keep tightly closed. Store at room temperature.

**Suitable Packaging:** Must only be kept in original packaging.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** Safety shower and eye bath. Mechanical exhaust required.

### Personal Protective Equipment

**Eye/face protection:** Chemical safety goggles.

**Respirators:** Self-contained breathing apparatus must be available in case of emergency.

**Protective clothing:** Where there is potential for skin contact, have available and wear as appropriate impervious gloves, apron, pants, and jacket.

**Hand protection:** Compatible chemical-resistant gloves.

**General Hygiene Measures:** Wash thoroughly after handling. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Molecular Weight** 718.20 g/mol  
**pH** Not measured

<b>Boiling Point</b>	170 °C @ 25 mm Hg
<b>Melting Point</b>	N/A
<b>Vapor Pressure</b>	N/A
<b>Vapor Density</b>	N/A
<b>Saturated Vapor Conc.</b>	N/A
<b>Density</b>	N/A
<b>Odor Threshold</b>	N/A
<b>Flash Point</b>	> 110 °C (closed cup)
<b>Explosion Limits</b>	N/A
<b>Refractive Index</b>	N/A
<b>Solubility in Water</b>	Negligible

N/A = not available

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## 10. STABILITY AND REACTIVITY

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<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Heat.
<b>Materials to Avoid:</b>	Strong oxidizing agents. Strong acids.
<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 melted bulk liquid if needed.

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## 11. TOXICOLOGICAL INFORMATION

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### Route Of Exposure

<b>Inhalation:</b>	Material may be irritating to mucous membranes and upper respiratory tract.
<b>Multiple routes:</b>	Causes eye and skin irritation. May be harmful by inhalation, ingestion, or skin absorption.

<b>Signs And Symptoms Of Exposure:</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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## 12. ECOLOGICAL INFORMATION

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No data available.

<b>General:</b>	Take care to prevent chemicals from entering the ground, water courses or drainage systems.
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## 13. DISPOSAL CONSIDERATIONS

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<b>Disposal Operations:</b>	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.
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**14. TRANSPORTATION INFORMATION**

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<b>Mode</b>	DOT/IMDG/IATA
<b>UN Number</b>	None. Non-hazardous for transport.
<b>Class (Subsidiary)</b>	None. Non-hazardous for transport.
<b>Proper Shipping Name</b>	None. Non-hazardous for transport.
<b>Hazard Label (Subsidiary)</b>	None. Non-hazardous for transport.
<b>Packing Group</b>	None. Non-hazardous for transport.
<b>Shipping Hazard Label</b>	None. Non-hazardous for transport.

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**15. REGULATORY INFORMATION**

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**Hazard symbols:** Irritant.



**Risk Phrases:**

**R36/37/38:** Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

**S26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**S36/37/39:** Wear suitable protective clothing, gloves and eye/face protection.

**S45:** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

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**16. OTHER INFORMATION**

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**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 MSDS