



Material Safety Data Sheet

FC05-08 Perfluorooctyl Ethyl Acrylate

Revised 12-August-2009

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product name: FC05-08
Chemical name: Perfluorooctyl ethyl acrylate
1H, 1H, 2H, 2H-Heptadecafluorooctyl-1-acrylate
Chemical formula: CH₂=CHC(O)OCH₂CH₂(CF₂CF₂)₄F
C₁₃H₇F₁₇O₂

Company Identification

Distributor: Fluoryx, Inc.
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San Leandro, CA 94577
USA
Emergency call: +86-1346-4812437
+1-510-329-2811

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Components

| Material | CAS # | EINECS # | TSCA Listed | Amount |
|---|------------|-----------|-------------|--------|
| 2-(Perfluorooctyl) ethyl acrylate | 27905-45-9 | 208-079-5 | Yes | > 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: Avoid contact and inhalation.

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

4. FIRST AID MEASURES

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Dermal Exposure: In case of contact, immediately wash skin with soap

and copious amounts of water.

Eye Exposure:

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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.

Specific hazard(s):

Emits toxic fumes under fire conditions.

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: avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage Conditions:

Keep tightly closed. Store at 2 to 8 °C.

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:

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

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 | 518.17 g/mol |
| pH | Not measured |
| Boiling Point | 90 °C @ 4 mm Hg |
| Melting Point | -4 °C |
| Vapor Pressure | N/A |
| Vapor Density (Air = 1) | > 1 |
| Saturated Vapor Conc. | N/A |
| Density | 1.64 g/mL @ 25 °C |
| Odor Threshold | N/A |
| Flash Point | > 110 °C |
| Explosion Limits | N/A |
| Refractive Index | $n_D^{25} = 1.3330$ |
| Solubility in Water | Negligible |
| Solubility in Organic Solvents | Miscible in carbon tetrachloride, methanol, isopropanol, acetone, <i>n</i> -hexane, toluene and perfluoro- <i>n</i> -hexane. |

N/A = not available

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable under normal conditions. |
| Conditions to Avoid: | Heat. |
| Materials to Avoid: | Strong oxidizing agents. Strong acids. |
| 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 melted bulk liquid if needed. |

11. TOXICOLOGICAL INFORMATION

| | |
|--|---|
| Route Of Exposure | |
| Skin contact: | May cause skin irritation. |
| Eye contact: | May cause eye irritation. |
| Inhalation: | Material may be irritating to mucous membranes and upper respiratory tract. |
| Multiple routes: | May be harmful by inhalation, ingestion, or skin absorption. |
| Signs And Symptoms Of Exposure: | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. |

12. ECOLOGICAL INFORMATION

No data available.

General:

Take care to prevent chemicals from entering the ground, water courses or drainage systems.

13. DISPOSAL CONSIDERATIONS

Disposal Operations:

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.

14. TRANSPORTATION INFORMATION

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

15. REGULATORY INFORMATION

US Classification And Label Text

US Statements:

Avoid contact and inhalation.

United States Regulatory Information

SARA LISTED:

No

Canada Regulatory Information

WHMIS Classification:

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL:

Yes

NDSL:

No

16. OTHER INFORMATION

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