



# Material Safety Data Sheet

## FC03-10 Perfluorodecyl Ethyl Iodide

Revised 12-August-2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Material Identification:

**Product name:** FC03-10  
**Chemical name:** Perfluorodecyl ethyl iodide;  
1*H*, 1*H*, 2*H*, 2*H*-Henicosafluoroodecyl-1-iodide  
**Chemical formula:** ICH<sub>2</sub>CH<sub>2</sub>(CF<sub>2</sub>CF<sub>2</sub>)<sub>5</sub>F  
C<sub>12</sub>H<sub>4</sub>F<sub>21</sub>I

#### 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 COMPONENTS

Material	Weight Percent	EINECS #	CAS #
Perfluorodecyl ethyl iodide	> 97 %	NA	2043-54-1

### 3. HAZARDS IDENTIFICATION

**Emergency Overview:** Irritant.  
Irritating to eyes, respiratory system and skin.

**HMIS Rating:** HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

**NFPA Rating:** HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

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.

<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
<b>Skin Contact:</b>	In case of contact, immediately wash skin with soap and copious amounts of water.
<b>Eye Contact:</b>	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

---

## 5. FIRE FIGHTING MEASURES

---

<b>Flammable Properties</b>	
Flash point:	> 120.2 °C (closed cup)
Autoignition temp:	N/A
Flammability:	N/A
<b>Extinguishing Media:</b>	Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
<b>Fire Fighting</b>	
Protective equipment:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific hazard(s):	Emits toxic fumes under fire conditions including hydrogen fluoride and carbon monoxide.

---

## 6. ACCIDENTAL RELEASE MEASURES

---

<b>Personal Protection:</b>	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
<b>Methods for Clean-Up:</b>	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

---

<b>Safe Handling:</b>	Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
<b>Storage:</b>	Keep tightly closed.
<b>Special Requirements:</b>	Light sensitive.

---

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

---

<b>Engineering Controls:</b>	Safety shower and eye bath. Mechanical exhaust required.
<b>Personal Protective Equipment:</b>	
Respiratory:	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 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

<b>Eye/face protection:</b>	means of protection, use a full-face supplied air respirator. Wear safety glasses or coverall chemical splash goggles. Wear NIOSH approved respiratory protection.
<b>Hand protection:</b>	Wear impervious gloves. Wash hands thoroughly after handling.
<b>Skin and body protection:</b>	Wear lightweight protective clothing. Avoid contact with skin and eyes. Wash hands immediately after handling the product.
<b>General Hygiene Measures:</b>	Wash thoroughly after handling.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Boiling Point</b>	281 °C @ 760 mm Hg
<b>Melting Point</b>	87 °C
<b>Molecular Weight</b>	674.03 g/mol
<b>Density</b>	1.82 g/mL @ 25 °C
<b>pH</b>	No data
<b>Form</b>	Solid
<b>Color</b>	Faintly pink
<b>Flash Point</b>	120.2 °C
<b>Refractive Index</b>	1.324
<b>Solubility in Water</b>	Negligible

---

## 10. STABILITY AND REACTIVITY

---

<b>Chemical Stability:</b>	Stable
<b>Conditions of Instability:</b>	May discolor on exposure to light.
<b>Hazardous Decomposition Products:</b>	Carbon monoxide, carbon dioxide, hydroiodic acid, hydrofluoric acid
<b>Materials to Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Polymerization:</b>	Polymerization will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

### Route Of Exposure

<b>Skin contact:</b>	Causes skin irritation.
<b>Skin absorption:</b>	May be harmful if absorbed through the skin.
<b>Eye contact:</b>	Causes eye irritation.
<b>Inhalation:</b>	May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.
<b>Ingestion:</b>	May be harmful if swallowed.

### Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

---

## 12. ECOLOGICAL EFFECT

---

<b>Ecological:</b>	No data available.
--------------------	--------------------

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

**13. DISPOSAL CONSIDERATIONS**


**Appropriate Method of Disposal of Substance or Preparation:** Contact a licensed professional waste disposal service to dispose of this material. 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**

<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.

**15. REGULATORY INFORMATION**

**EU Additional Classification**

<b>Symbol of Danger:</b>	
<b>Indication of Danger:</b>	Irritant.
<b>R:</b>	36/37/38
<b>Risk Statements:</b>	Irritating to eyes, respiratory system and skin.
<b>S:</b>	26
<b>Safety Statements:</b>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

**US Classification and Label Text**

<b>Indication of Danger:</b>	Irritant.
<b>Risk Statements:</b>	Irritating to eyes, respiratory system and skin.
<b>Safety Statements:</b>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

**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:** No

**NDSL:** Yes

**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.

To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Fluoryx Inc., nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes.

End of MSDS