

**FC03-02**

## 2-(Perfluoroethyl)ethyl iodide

Revised 06-February-2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product Identifier

Product name	2-(Perfluoroethyl)ethyl iodide
Catalog number	FC03-02
Brand	Fluoryx Labs
CAS number	40723-80-6

#### 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 (ChemTel)

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

### 2. HAZARDS INFORMATION

#### Emergency Overview

#### Classification of the Substance or Mixture

##### GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301  
 Eye irritation (Category 2A), H319  
 Acute aquatic toxicity (Category 3), H402  
 Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

#### Hazard statement(s)

H301	Toxic if swallowed.
H319	Causes serious eye irritation.

H412

Harmful to aquatic life with long lasting effects.

**Precautionary statement(s)**

P264

Wash skin thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P273

Avoid release to the environment.

P280

Wear eye protection/ face protection.

P301 + P310 + P330

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313

If eye irritation persists: Get medical advice/ attention.

P405

Store locked up.

P501

Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none****3. COMPOSITION AND INFORMATION ON INGREDIENTS****Synonyms**

1H,1H,2H,2H-Perfluorobutyl iodide;  
 1,1,1,2,2-Pentafluoro-4-iodobutane;  
 4-Iodo-1,1,2,2-pentafluorobutane;  
 Butane, 1,1,1,2,2-pentafluoro-4-iodo-

**Formula**

C<sub>4</sub>H<sub>4</sub>F<sub>5</sub>I  
 CF<sub>3</sub>CF<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>I

**Molecular Weight**

273.97 g/mol

**CAS Number**

40723-80-6

**EC Number**

255-055-5

**Hazardous Components**

Component	Classification	Concentration
2-(Perfluoroethyl)ethyl iodide	Acute Tox. 3; Eye Irrit. 2A; Aquatic Acute 3; Aquatic Chronic 3; H301, H319, H412	≤100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

**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. Take victim immediately to hospital. 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**

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**

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**5. FIREFIGHTING 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.
<b>Hazardous combustion products</b>	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, hydrogen iodide.

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**6. ACCIDENTAL RELEASE MEASURES**

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<b>Personal precautions</b>	Wear respiratory protection. Avoid inhalation of vapor, mist, 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>	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers and dispose of as hazardous waste.

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**7. HANDLING AND STORAGE**

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<b>Precautions for Safe Handling</b>	Avoid contact with skin and eyes. Avoid formation of mist or respirable particles. Provide appropriate exhaust ventilation at places where mist or vapors are formed. Normal measures for preventive fire protection.
<b>Conditions for Safe Storage</b>	Store in cool, dry, well-ventilated place protected from light. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  Light sensitive.  Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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

<b>Appropriate engineering controls</b>	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (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).
<b>Hand protection</b>	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.
<b>Eye protection</b>	Face shield and 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).
<b>Skin and body protection</b>	Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Hygiene measures</b>	Avoid contact with skin, eyes, and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Form	Liquid, clear
Color	Colorless, turns pink on exposure to light

### Safety Data

pH	No data available
Melting Point/Freezing Point	No data available
Boiling Point	98 – 101 °C at 760 mm Hg
Flash Point	> 98 °C (closed cup)
Ignition Temperature	No data available
Auto-ignition Temperature	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Thermal Decomposition Temperature	No data available
Vapor Pressure	No data available
Density	1.936 g/mL @ 20 °C
Water Solubility	Negligible
Partition Coefficient ( <i>n</i> -octanol/water)	Log Pow: 2.553
Relative Vapor Density (Air = 1)	> 1
Odor	No data available
Odor Threshold	No data available
Evaporation Rate	No data available
Oxidizing Properties	No data available

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## 10. STABILITY AND REACTIVITY

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<b>Reactivity</b>	No data available
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<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	Keep away from open flames and heated surfaces above 200 °C (392 °F). Sensitive to light and oxygen.
<b>Incompatible Materials</b>	Strong oxidizing agents. Strong bases. Aluminum, potassium, magnesium. Sodium/sodium oxides.
<b>Hazardous Decomposition Products</b>	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, hydrogen iodide. Decomposes when exposed to UV light.

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**11. TOXICOLOGICAL INFORMATION**

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<b>Acute toxicity</b>	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>	No data available.
<b>Germ cell mutagenicity</b>	No data available.
<b>Carcinogenicity</b>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity (Globally Harmonized System)</b>	
<b>Single exposure</b>	No data available.
<b>Repeated exposure</b>	No data available.
<b>Aspiration Hazard</b>	No data available
<b>Synergistic Effects</b>	No data available
<b>Additional Information</b>	RTECS: not available

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**12. ECOLOGICAL INFORMATION**

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<b>Toxicity</b>	No data available
<b>Persistence and Degradability</b>	No data available
<b>Bioaccumulative Potential</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>PBT and vPvB Assessment</b>	No data available
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the

event of unprofessional handling or disposal.  
Harmful to aquatic life - no data available.

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### 13. DISPOSAL CONSIDERATIONS

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<b>Product</b>	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. Offer unused surplus to Fluoryx. Prevent wastewater, spent solvent, and materials containing or contaminated with solvent from entering waterways. Wastewater should be sent to a wastewater treatment facility.
<b>Contaminated packaging</b>	Dispose of as unused product.

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### 14. TRANSPORTATION INFORMATION

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<b>DOT (US)</b>	UN number: 2810 Class: 6.1 Packing group: III Proper shipping name: Toxic, liquids, organic, n.o.s. (1,1,1,2,2-Pentafluoro-4-iodobutane) Poison Inhalation Hazard: No
<b>IMDG</b>	UN number: 2810 Class: 6.1 Packing group: III EMS-No: F-A, S-A Proper shipping name: TOXIC, LIQUIDS, ORGANIC, N.O.S. (1,1,1,2,2-Pentafluoro-4-iodobutane)
<b>IATA</b>	UN number: 2810 Class: 6.1 Packing group: III Proper shipping name: Toxic, liquids, organic, n.o.s. (1,1,1,2,2-Pentafluoro-4-iodobutane)

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### 15. REGULATORY INFORMATION

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<b>OSHA Hazards</b>	Toxic by ingestion, Irritant
<b>TSCA Status</b>	On the inventory or in compliance with the inventory.
<b>DSL Status</b>	This product contains the following components listed on the Canadian NDSL list: Butane, 1,1,1,2,2-pentafluoro-4-iodo- CAS-No. 40723-80-6
<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 health hazard
<b>Massachusetts Right To Know Components</b>	No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**1,1,1,2,2-Pentafluoro-4-iodobutane  
CAS-No. 40723-80-6**New Jersey Right To Know Components**1,1,1,2,2-Pentafluoro-4-iodobutane  
CAS-No. 40723-80-6**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****Full Text of H-Statements Referred to Under Sections 2 and 3.**

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Irrit.	Eye irritation
H301	Toxic if swallowed.
H319	Causes serious eye irritation.

**HMIS Classification**

Health Hazard:	2
Flammability:	0
Physical hazards:	0

**NFPA Rating**

Health Hazard:	2
Fire:	0
Reactivity Hazard:	0

**Further Information**

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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