

## FC14-12

## Perfluorododecyl Bromide

Revised 03-March-2019

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**1. PRODUCT AND COMPANY IDENTIFICATION**


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**Product Identifier**

Product Name	Perfluorododecyl bromide
Catalog Number	FC14-12
Brand	Fluoryx Labs
CAS Number	67193-90-2

**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
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**Emergency call (Chemtel):**

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

**GHS Label elements, including precautionary statements**

Pictogram



Signal word	Warning
Hazard statement(s)	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
H315	
H319	
H335	
Precautionary statement(s)	

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 or doctor/physician 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.
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 COMPONENTS**

<b>Synonyms:</b>	1-Bromopentacosfluorododecane ; 1-Bromo-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-pentacosfluorododecane; Pentacosfluorododecyl bromide
<b>Chemical Formula:</b>	CF <sub>3</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> Br C <sub>12</sub> BrF <sub>25</sub>
<b>Molecular Weight</b>	698.99 g/mole
<b>CAS Number</b>	67193-90-2
<b>EC Number</b>	None

**Hazardous components**

Component	Classification	Concentration
Perfluorododecyl bromide	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	≤100%

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

**4. FIRST AID MEASURES**

<b>General advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>If inhaled</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>In case of skin contact</b>	Wash off with soap and plenty of water. Consult a physician.

<b>In case of eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>If swallowed</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	None
<b>Firefighting</b>	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
<b>Specific Hazard(s):</b>	Emits toxic fumes under fire conditions.
<b>Suitable Extinguishing Medium:</b>	Water spray, alcohol-resistant foam, carbon dioxide, or dry chemical powder.
<b>Hazardous Products of Combustion May Include:</b>	Carbon monoxide, carbon dioxide, hydrogen fluoride (hydrofluoric acid), hydrogen bromide (hydrobromic acid).

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental Precautions:</b>	Take precautions to ensure product does not contaminate the ground or enter the drainage system.
<b>Spill Clean-Up</b>	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

<b>Precautions for Safe Handling:</b>	Avoid formation of respirable particles. Do not breathe vapors or spray mist. Wash thoroughly after handling. Have safety shower and eye wash available. Do not get in eyes, on skin, or on clothing.
<b>Conditions for Safe Storage:</b>	Store in cool, dry, well-ventilated area. Keep container tightly closed. Keep away from sources of ignition.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

<b>Contains no substances with occupational exposure limit values.</b>	
<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 means of protection, use a full-face supplied air respirator.
Hand:	Compatible chemical-resistant gloves.
Eye:	Safety glasses with side-shields conforming to EN166.
Skin and body protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Form	Solid
Color	White

### SAFETY DATA

Boiling Point	108 °C at 20 mm Hg
Melting Point	89 - 93 °C
pH	No data available
Odor	None
Odor threshold	No data available
Flash Point	> 110 °C (closed cup)
Evaporation rate	No data available
Vapor pressure	No data available
Vapor density	>1 (air = 1)
Ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Density	1.86 g/mL @ 25 °C
Oxidizing properties	No data available
Solubility in Water	Negligible
Viscosity	No data available

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability:</b>	Stable at normal temperatures and storage conditions.
<b>Possibility of Hazardous Reactions:</b>	No data available
<b>Conditions to Avoid:</b>	Heat/sources of heat. Light.
<b>Materials to Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	May evolve carbon dioxide, carbon monoxide, and hydrogen fluoride and hydrogen bromide.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Other Information:</b>	No data available

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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

<b>Dermal LD50</b>	No data available
<b>Other information on 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>	
<b>IARC:</b>	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.
<b>ACGIH:</b>	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.
<b>NTP:</b>	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.
<b>OSHA:</b>	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.
<b>Reproductive toxicity</b>	No data available
<b>Teratogenicity</b>	No data available
<b>Specific target organ toxicity - single exposure (Globally Harmonized System)</b>	Inhalation - May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure (Globally Harmonized System)</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Potential health effects</b>	
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.
<b>Synergistic effects</b>	No data available
<b>Additional Information</b>	
<b>RTECS</b>	Not available

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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<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	Does not readily degrade
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>PBT and vPvB assessment</b>	No data available

**Other adverse effects** No data available

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### 13. DISPOSAL CONSIDERATIONS

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**Product** Offer non-recyclable solutions to a licensed disposal company. Contact Fluoryx to return unused product.

**Contaminated packaging** Dispose of as unused product.

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### 14. TRANSPORT INFORMATION

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**DOT (US)** Not dangerous goods

**IMDG** Not dangerous goods

**IATA** Not dangerous goods

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### 15. REGULATORY INFORMATION

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**TSCA Status** Not listed on the inventory

**SARA 302 Components** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** 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.

**SARA 311/312 Hazards** Acute Health Hazard

**Massachusetts Right To Know Components** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components** No components are subject to the Pennsylvania Right to Know Act.

**New Jersey Right To Know Components** No components are subject to the New Jersey Right to Know Act.

**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.

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### 16. OTHER INFORMATION

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**Full text of H-Statements referred to under sections 2 and 3.**

Eye Irrit. Eye irritation  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
Skin Irrit. Skin irritation  
STOT SE Specific target organ toxicity - single exposure

**HMIS Classification**

Health Hazard:	1
Flammability:	0
Physical Hazards:	0

**NFPA Rating**

Health Hazard:	1
Fire:	0
Reactivity Hazard:	0

**Further Information:** 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