



# Material Safety Data Sheet

## FC14-12 PERFLUORODECYL BROMIDE

Revised 19-December-2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Material Identification:

**Product name:** FC14-12

**Chemical names:** 1-Bromopentacosafuorododecane;  
Perfluorododecyl bromide;  
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-pentacosafuorododecane;  
Pentacosafuorodecyl bromide

**Chemical formula:**  $\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{Br}$   
 $\text{C}_{12}\text{BrF}_{25}$

#### Company Identification

**Distributor:** **Fluoryx, Inc.**  
20885 Redwood Rd. #347  
Castro Valley, CA 94546

#### Emergency call:

USA  
+86-1346-4812437  
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### 2. COMPOSITION AND INFORMATION ON COMPONENTS

Material	Molecular Weight	EINECS #	CAS #
Perfluorododecyl bromide	698.99	Not available	67193-90-2

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview:

**Irritant:** irritating to eyes, respiratory system and skin.

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

### 4. FIRST AID MEASURES

#### Potential Effects Of Exposure:

**Oral:** If swallowed, wash out mouth with water provided

<b>Inhalation:</b>	person is conscious. Call a physician. Remove from exposure area and lie down. If breathing is difficult give oxygen. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the side recovery position. When symptoms persist, or in all cases of doubt, seek medical advice. If not breathing, give artificial respiration.
<b>Eye Contact:</b>	Flush with copious amounts of water for at least 15 minutes. If irritation persists, seek medical attention.
<b>Skin Contact:</b>	Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. If irritation persists or other symptoms are observed, seek medical advice.

**5. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	87.9 °C (closed cup).
<b>Firefighting</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.
<b>Extinguishing Medium:</b>	Suitable: water spray, carbon dioxide, dry chemical powder, or appropriate foam.
<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 Protection:</b>	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Evacuate personnel to safe areas.
<b>Environmental Protection:</b>	Take precautions to ensure product does not contaminate the ground or enter the drainage system.
<b>Spill Clean-Up</b>	Mix with vermiculite or proprietary absorbent material and transfer to sealed containers for disposal.

**7. HANDLING AND STORAGE**

<b>Safe Handling:</b>	Avoid formation of respirable particles. Do not breathe vapors or spray mist. Wash hands immediately after handling the product. Advice on protection against fire and explosion: do not spray on a naked flame or any other incandescent material.
<b>Storage:</b>	Store in tightly sealed containers in a cool, well-ventilated place.

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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**Fire And Explosion Protection:**

Do not spray on a naked flame or any other incandescent material. Store in tightly sealed containers in a cool, well-ventilated place.

**Engineering Controls**

Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment**

## 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:

Chemical safety goggles.

**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**Boiling Point**  
**Molecular Weight**  
**Form**  
**Flash Point**  
**Melting Point**  
**Density**  
**Refractive Index**  
**Solubility in Water**

221.8 °C at 760 mm Hg  
698.99  
Clear, colorless liquid  
87.9 °C (closed cup)  
87-88 °C  
1.856 g/mL @ 25 °C  
1.293 @ 25 °C  
Negligible

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**10. STABILITY AND REACTIVITY**

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**Conditions to Avoid:**

Processing temperature > 200 °C

**Materials to Avoid:**

Strong oxidizing agents

**Hazardous Reactions:**

None reasonably foreseeable

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**11. TOXICOLOGICAL INFORMATION**

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**Route Of Exposure**

Skin Contact:

Causes skin irritation.

Multiple Routes:

Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract. 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.

**Toxicity Data**

The toxicological properties of this material have not been fully investigated.

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**12. ECOLOGICAL EFFECT**

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**General** Prevent chemicals from entering the ground, water courses, or drainage system.

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**13. DISPOSAL CONSIDERATIONS**

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**Disposal:** 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
<b>Class (Subsidiary)</b>	None – non-hazardous
<b>Proper Shipping Name</b>	None – non-hazardous
<b>Hazard Label (Subsidiary)</b>	None – non-hazardous
<b>Packing Group</b>	None – non-hazardous
<b>Shipping Hazard Label</b>	None – non-hazardous

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**15. REGULATORY INFORMATION**

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<b>EINECS Number:</b>	Not available
<b>UN Number:</b>	None – non-hazardous
<b>CAS Number:</b>	67193-90-2
<b>SARA Listed:</b>	No
<b>DSL:</b>	No
<b>NDSL:</b>	No

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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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