



# Material Safety Data Sheet

## FC13-TE4-O-C3

1,1,1,2,2,3,3,4,4-Nonafluoro-6-Propoxyhexane

Revised 22-December-2009

---

### 1. PRODUCT AND COMPANY IDENTIFICATION

---

#### Material Identification

**Product name:** FC13-TE4-O-C3  
**Chemical name:** 1,1,1,2,2,3,3,4,4-Nonafluoro-6-propoxyhexane  
**Chemical formula:** C<sub>4</sub>F<sub>9</sub>CH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>  
C<sub>9</sub>H<sub>11</sub>F<sub>9</sub>O  
**Synonym:** Not available

#### Company Identification

**Distributor:** **Fluoryx, Inc.**  
1933 Davis St. Ste 293  
San Leandro, CA 94577  
USA  
**Emergency call:** +86-1346-4812437  
+1-510-3292811

---

### 2. COMPOSITION AND INFORMATION ON COMPONENTS

---

Material	Molecular Weight	EINECS #	CAS #
1,1,1,2,2,3,3,4,4-Nonafluoro-6-propoxyhexane	306.17	Not available	Not available

---

### 3. HAZARDS IDENTIFICATION

---

**Flash Point:** 41 °C (closed cup) – flammable liquid  
**Emergency Overview:** Irritating to eyes, respiratory system and skin.

---

### 4. FIRST AID MEASURES

---

**Inhalation:** Remove to fresh air. If breathing is difficult give oxygen and seek medical attention.  
**Eye Contact:** Flush with copious amounts of water for at least 15 minutes. If irritation persists, seek medical

<b>Skin Contact:</b>	attention. Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. If irritation persists or other symptoms are observed, seek medical advice.
<b>Ingestion:</b>	Rinse out mouth and drink lots of water. In case of irritation or other symptoms, seek medical attention
<b>If the Subject is Completely Conscious:</b>	Rinse mouth and administer fresh water.
<b>If the Subject is Unconscious:</b>	Not applicable.
<b>Medical Treatment/Notes to Physician:</b>	None.

## 5. FIRE FIGHTING MEASURES

<b>Flash Point:</b>	41 °C (closed cup) – flammable liquid
<b>Firefighting</b>	
<b>Protective Equipment:</b>	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>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, and hydrogen fluoride (hydrofluoric acid)

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Wear protective equipment including rubber gloves, and eye protection. Keep unprotected persons away.
<b>Environmental Precautions:</b>	Take precautions to ensure product does not contaminate the ground or enter the drainage system.
<b>Waste Collections:</b>	Mix with vermiculite or proprietary absorbent material and transfer to sealed containers for disposal.

## 7. HANDLING AND STORAGE

<b>Handling Requirements:</b>	Chemicals should be used only by those trained in handling potentially hazardous materials. Rubber gloves, eye protection and protective clothing should be worn. Operations should be carried out in an efficient fume hood or equivalent system.
-------------------------------	--

**Protection against Fire and Explosion:**

Do not spray on a naked flame or any other incandescent material. Keep flames away.

**Storage Conditions:**

Store in tightly sealed containers in a cool place. Protect from moisture. Store in a flammable materials cabinet.

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Occupational Exposure Controls:**

**Respiratory:**

Avoid inhalation of product. Handle in an efficient fume hood or equivalent system.

**Hand and body protection:**

Irritant product. Avoid skin contact. Wear rubber gloves, protective clothing and, for larger quantities, full arm, body and face protection. Wash hands thoroughly after handling.

**Eye protection:**

Avoid eye contact. Wear safety spectacles, goggles or, for larger quantities, a full face mask.

**Fire And Explosion Protection:**

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Clear liquid
<b>Color</b>	Colorless
<b>Molecular Weight</b>	306.17 g/mole
<b>Boiling Point</b>	142 °C @ 760 mm Hg
<b>Melting Point</b>	-74 °C
<b>Flash Point</b>	41 °C (closed cup)
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	Not available
<b>Refractive Index</b>	1.3092 @ 27 °C
<b>Oxidizer</b>	Non-oxidizing (by EC criteria)

**10. STABILITY AND REACTIVITY**

**Materials and Substances to Avoid:**

Strong bases. Strong oxidizing agents.

**Hazardous Decomposition Products:**

May include: carbon monoxide, carbon dioxide, hydrogen fluoride (hydrofluoric acid).

**Polymerization:**

Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**RTECS No.**

Not listed.

**Acute Toxicity:**

LD<sub>50</sub>: Not available.

Irritating to eyes, respiratory system and skin.

---

**12. ECOLOGICAL INFORMATION**

---

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

---

**13. DISPOSAL CONSIDERATIONS**

---

**Disposal Treatment:** Disposal should be via an approved contractor and should take full account of local regulations.

---

**14. TRANSPORT INFORMATION**

---

<b>Mode</b>	DOT/IMDG/IATA
<b>UN Number</b>	UN1993
<b>Class (Subsidiary)</b>	3
<b>Proper Shipping Name</b>	Flammable Liquid, n.o.s.
<b>Hazard Label (Subsidiary)</b>	Flammable Liquid
<b>Packing Group</b>	III
<b>Shipping Hazard Label:</b>	



---

**15. OTHER INFORMATION**

---

**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.

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