

## FC13-894Ca

## 3-(1,1,2,2-Tetrafluoroethoxy) Benzaldehyde

Revised 14-November-2016

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 1. PRODUCT AND COMPANY IDENTIFICATION
 

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<b>Product Name</b>	3-(1,1,2,2-Tetrafluoroethoxy) benzaldehyde
<b>Catalog Number</b>	FC13-894Ca
<b>Supplier</b>	<b>Fluoryx Labs</b> 3650 Research Way, #22 Carson City, NV 89706 USA
<b>Emergency call:</b>	+01-813-248-0585 (International) +1-800-255-3924 (USA)

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 2. HAZARDS INFORMATION
 

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## Emergency Overview

<b>OSHA Hazards</b>	No known OSHA hazards
<b>GHS Classification</b>	Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity - single exposure (Category 3)

## GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
<b>Hazard statement(s)</b>	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
<b>Precautionary statement(s)</b>	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Potential Health Effects</b>	
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.

**Eyes  
Ingestion**

May cause eye irritation.  
May be harmful if swallowed.

**3. COMPOSITION AND INFORMATION ON INGREDIENTS****Synonyms**

*m*-(1,1,2,2-tetrafluoroethoxy)benzaldehyde;  
Benzaldehyde, 3-(1,1,2,2-tetrafluoroethoxy)-;  
HFE-894Ca;  
3-Tetrafluoroethoxybenzaldehyde

**Chemical formula**

C<sub>9</sub>H<sub>6</sub>F<sub>4</sub>O<sub>2</sub>  
*m*-HC(O)C<sub>6</sub>H<sub>4</sub>OCF<sub>2</sub>CF<sub>2</sub>H

**Components**

Material	Molecular Weight	CAS #	EINECS #	TSCA
3-(1,1,2,2-Tetrafluoroethoxy) benzaldehyde	222.14	35295-35-3	252-496-5	Listed

**4. FIRST AID MEASURES****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**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. 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.

**5. FIREFIGHTING MEASURES****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for fire fighting.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions - carbon oxides and hydrogen fluoride.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment. Avoid inhalation of vapor, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

Do not let product enter drains.

**Methods for cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection. Handle under inert gas. Protect from

moisture. Air sensitive.

### Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated place. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

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).

#### Hand protection

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.

#### Eye protection

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).

#### Skin and body protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form Clear liquid

Color Colorless

### Safety Data

pH No data available

Melting Point/Freezing Point No data available

Boiling Point 100-102 °C @ 12 mm Hg

Flash Point 102 °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	1.39 g/mL @ 25 °C
Water Solubility	Reacts
Partition Coefficient ( <i>n</i> -octanol/water)	No data available
Relative Vapor Density (Air = 1)	No data available
Odor	No data available
Odor Threshold	No data available
Evaporation Rate	No data available
Refractive index	1.45 @ 20 °C

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**10. STABILITY AND REACTIVITY**

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<b>Storage stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	No data available.
<b>Conditions to avoid</b>	Air sensitive.
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, carbonyl fluoride.

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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.
Dermal LD50	No data available.
Other information on acute toxicity	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>Tetragenicity</b>	No data available
<b>Specific target organ toxicity (Globally Harmonized System)</b>	
<b>Single exposure</b>	Inhalation - may cause respiratory irritation.
<b>Repeated exposure</b>	No data available

<b>Aspiration Hazard</b>	No data available
<b>Potential Health Effects</b>	
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eyes irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Signs and Symptoms of Exposure</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
<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>	No data available

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**13. DISPOSAL CONSIDERATIONS**

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<b>Product</b>	Offer non-recyclable solutions to a licensed disposal company. Contact Fluoryx to return unused product.
<b>Contaminated packaging</b>	Dispose of as unused product.

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**14. TRANSPORTATION INFORMATION**

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<b>DOT (US)</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

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**15. REGULATORY INFORMATION**

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<b>OSHA Hazards</b>	No known OSHA hazards.
<b>TSCA Status</b>	Listed on the TSCA Inventory.
<b>DSL Status</b>	The substance is specified on the Non-domestic Substances List (NDSL).
<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>	No SARA hazards.
<b>Massachusetts Right To Know Components</b>	No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

m-(1,1,2,2-Tetrafluoroethoxy)benzaldehyde  
CAS 35295-35-3

**New Jersey Right To Know Components**

m-(1,1,2,2-Tetrafluoroethoxy)benzaldehyde  
CAS 35295-35-3

**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**

**HMIS Classification**

Health Hazard:	0
Flammability:	1
Physical hazards:	0

**NFPA Rating**

Health Hazard:	0
Fire:	1
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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End of SDS