

FC22-MTFMP

Methyl 2,2,3,3-Tetrafluoro-3-(methoxy)propionate

Revised 02-January-2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Methyl 2,2,3,3-tetrafluoro-3-(methoxy)propionate
Catalog Number	FC22-MTFMP
• CAS Number	755-73-7
Relevant identified uses of the substance or mixture and uses advised against	Identified uses: Laboratory chemicals, Synthesis of substances
Supplier	Fluoryx Labs 3650 Research Way, #22 Carson City, NV 89706 USA
Emergency call (VelocityEHS):	+01-813-248-0585 (International) +1-800-255-3924 (USA)


2. HAZARDS INFORMATION

Classification of the substance or mixture

GHS Classification	Flammable liquids (Category 3), H225 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335
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For the full text of the H-Statements mentioned in the Section, see Section 16

GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	Flammable liquid and vapor Causes skin irritation Causes serious eye irritation May cause respiratory irritation
Precautionary statement(s)	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use only outdoors or in a well-ventilated area.
P210	
P271	

P280	Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

Inhalation of decomposition products from overheating may cause lung irritation or shortness of breath.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms	Propanoic acid, 2,2,3,3-tetrafluoro-3-methoxy-, methyl ester Methyl 3-methoxytetrafluoropropanoate Methyl 2,2,3,3-tetrafluoro-3-methoxypropionate
Chemical formula	C ₅ H ₆ F ₄ O ₃
Molecular weight	190.09 g/mol
CAS number	755-73-7

Component	Classification	Concentration
Methyl 2,2,3,3-tetrafluoro-3-(methoxy)propionate	Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H225, H315, H319, H335	≤ 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. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician

If swallowed

Do NOT induce vomiting. 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

5. FIREFIGHTING MEASURES**Suitable extinguishing media**

Dry powder. Dry sand.

Unsuitable extinguishing media

Do NOT use water jet.

Special hazards arising from the substance or mixture - Carbon oxides, hydrogen fluoride**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Reference to other sections

For disposal see section 13.

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

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 2.2.

Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 3: Flammable liquids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Components with workplace control parameters Contains no substances with occupational exposure limit values.

Exposure controls**Appropriate engineering controls**

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

Personal protective equipment**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Body Protection

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

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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form

Liquid, clear

Color

Colorless

Safety Data

pH

No data available

Melting Point/Freezing Point

No data available

Boiling Point

159 °C @ 760 mm Hg

Flash Point

48 °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	1.331 g/mL @ 25 °C
Water Solubility	No data available
Partition Coefficient (<i>n</i> -octanol/water)	No data available
Relative Vapor Density (Air = 1)	> 1
Odor	No data available
Odor Threshold	No data available
Evaporation Rate	No data available
Refractive index	1.3327
Viscosity	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Hazardous reactions will not occur under normal transport or storage conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents, strong acids.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride Other decomposition products - No data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50	No data available
Inhalation LCLo	Rat, 2100 ppm/4H. Note: behavior changes in motor activity.
Dermal LD50	No data available
Other information on acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	No data available
Carcinogenicity	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. 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. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens 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.

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.

Reproductive toxicity	No data available
Specific target organ toxicity (Globally Harmonized System)	
Single exposure	May cause respiratory irritation.
Repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and Degradability	No data available
Bioaccumulative Potential	No data available
Mobility in Soil	No data available
PBT and vPvB Assessment	No data available
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Product	Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material. Contact Fluoryx Labs to return unused product.
Contaminated packaging	Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)	UN number: 1993 Class: 3 Packing group: III Proper shipping name: Flammable Liquid, n.o.s. Reportable Quantity (RQ): Poison Inhalation Hazard: No
IMDG	UN number: 1993 Class: 3 Packing group: III Proper shipping name: Flammable Liquid, n.o.s.
IATA	UN number: 1993 Class: 3 Packing group: III Proper shipping name: Flammable Liquid, n.o.s.

15. REGULATORY INFORMATION

TSCA Status	Listed.
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EC Number	212-048-1
Canadian NDSL (Non-Domestic Substances List)	Listed
Japanese ISHL (Industrial Safety and Health Law)	Listed
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	No SARA hazards.
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.

16. OTHER INFORMATION

Further information:

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquid and vapor, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity (single exposure), Category 3
H226	Flammable liquid and vapor
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA Ratings

Health hazard	3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
Fire hazard	3 – Liquids and solids that can be ignited under most all ambient conditions.
Reactivity	0 – Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health	2 - Moderate Hazard - Temporary or minor injury may occur.
Flammability	3 - Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical

0 - Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

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 MSDS