

FC13-356mec3

1,1,2,3,3,3-Hexafluoropropyl Methyl Ether

Revised 24-April-2023

 1. PRODUCT AND COMPANY IDENTIFICATION


Product Name	1,1,2,3,3,3-Hexafluoropropyl methyl ether
Catalog Number	FC13-356mec3
CAS Number	382-34-3
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

Emergency Overview

GHS Classification	Skin Irrit. 2, H315 - Causes skin irritation Eye Irrit. 2A, H319 - Causes serious eye irritation STOT SE 3, H336 - May cause drowsiness or dizziness STOT SE 3, H335 - May cause respiratory irritation
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GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H315: Causes skin irritation. H320: Causes eye irritation. H335: May cause respiratory irritation H336: May cause drowsiness or dizziness
Precautionary statement(s)	P261: Avoid breathing fumes, mist, spray, vapors. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/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.
 P332 + P313: If skin irritation occurs: Get medical advice/attention.
 P337 + P313: If eye irritation persists: Get medical advice/attention.

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	DY-54; DAIKIN T-8301; 1,1,1,2,3,3-Hexafluoro-4-oxapentane; 1-Methoxy-1,1,2,3,3,3-hexafluoropropane; 1,1,2,3,3,3-Hexafluoro-1-methoxypropane; 1,1,2,3,3-Hexafluoropropyl methyl ether; Methyl-1,1,2,3,3,3-pentafluoropropylether
Chemical formula	(CF ₃) ₂ CHCF ₂ OCH ₃ C ₄ H ₄ F ₆ O
Molecular weight	182.06 g/mol
CAS number	382-34-3
EC number	None
TSCA status	Not listed

Components

Material	Classification	Concentration
1,1,2,3,3,3-Hexafluoropropyl methyl ether	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 STOT SE 3, H335	≤ 100%

4. FIRST AID MEASURES

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. Get medical advice/attention.
In case of eye contact	Flush eyes with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician
If swallowed	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment, such as: carbon dioxide, dry chemical powder, water. Do not use water with a full water jet.
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, hydrogen fluoride.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear personal protective equipment. Avoid contact with the skin and the eyes. Ensure adequate ventilation. Avoid inhalation of vapor, mist, dust, or gas.

Environmental precautions

Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Mix with sand or vermiculite. Transfer to a closable, labeled salvage container for disposal by an appropriate method

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment**Appropriate engineering controls**

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection

Protective gloves. 29 CFR 1910.138: Hand Protection.

Eye protection

Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection.

Other information

Safety shoes. 29 CFR 1910.136: Foot Protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form

Liquid

Color

Colorless

Safety Data

pH	No data available
Melting Point/Freezing Point	No data available
Boiling Point	53 °C @ 760 mm Hg
Flash Point	No data available
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	1.47 g/mL @ 20 °C
Water Solubility	No data available
Partition Coefficient (<i>n</i> -octanol/water)	No data available
Relative Vapor Density (Air = 1)	> 1
Odor	Ether-like
Odor Threshold	No data available
Evaporation Rate	No data available
Refractive index	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

Storage stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Polymerization will not occur. No additional information available.
Conditions to avoid	Keep away from open flames and heated surfaces above 300 °C.
Materials to avoid	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50	No data available
Inhalation LC50	No data available
Dermal LD50	No data available
Other information on acute toxicity	No data available
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
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. 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.

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 drowsiness or dizziness. May cause respiratory irritation.

Repeated exposure

No data available

Aspiration Hazard

No data available

Synergistic Effects

No data available

Additional Information

No data available

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and Degradability

Likely to persist in the environment

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 non-recyclable solutions to a licensed disposal company. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Contact Fluoryx Labs to return unused product.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards.

TSCA Status

Not listed.

DSL Status

No data available

Japanese ENCS inventory

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

Serious eye irritation.

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

Eye Irrit. 2A
Skin Irrit. 2
STOT SE 3

Serious eye damage/eye irritation Category 2A
 Skin corrosion/irritation Category 2
 Specific target organ toxicity (single exposure) Category 3

STOT SE 3

Specific target organ toxicity (single exposure) Category 3

H315
H319
H335
H336

Causes skin irritation
 Causes serious eye irritation
 May cause respiratory irritation
 May cause drowsiness or dizziness

NFPA health hazard

3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard
NFPA reactivity

0 - Materials that will not burn.
 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
 Physical

0 Minimal Hazard - Materials that will not burn
 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.

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 MSDS