



Safety Data Sheet

FC13-FDMB

2,2,3,3-Tetrafluoro-1,4-Dimethoxybutane

Revised 21-January-2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	2,2,3,3-Tetrafluoro-1,4-dimethoxybutane
Catalog Number	FC13-FDMB
CAS Number	2738080-99-2
Supplier	Fluoryx Labs 3650 Research Way, #22 Carson City, NV 89706 USA
Emergency call (ChemTel):	+01-813-248-0585 (International) +1-800-255-3924 (USA)

2. HAZARDS INFORMATION

Emergency Overview

OSHA Hazards	No known OSHA hazards
GHS Classification	Skin irritation, H315 Eye irritation, H319

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
Precautionary statement(s)	P264: Wash hands thoroughly after handling. 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. P332 + P313: If skin irritation occurs: Get medical advice/attention. P337 + P313: If eye irritation persists: Get medical advice/attention.

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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	Fluorinated 1,4-dimethoxybutane
Chemical formula	CH ₃ OCH ₂ CF ₂ CF ₂ CH ₂ OCH ₃ C ₆ H ₁₀ O ₂ F ₄
Molecular weight	190.14 g/mol

Components

Material	Concentration	CAS #	EC #	TSCA
2,2,3,3-Tetrafluoro-1,4-dimethoxybutane	≤ 100%	2738080-99-2	None	Not listed

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.
In case of eye contact	Flush eyes with water for 15 minutes. 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 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	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.
Conditions for Safe Storage	Keep container tightly closed in a dry and

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well-ventilated place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment**Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. 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

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

General industrial hygiene practice.

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 150 °C @ 760 mm Hg; 87 °C 70 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 1.21 g/mL @ 20 °C
Water Solubility Insoluble
Partition Coefficient (*n*-octanol/water) No data available
Relative Vapor Density (Air = 1) > 1
Odor Ether-like
Odor Threshold No data available
Evaporation Rate No data available

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Refractive index No data available
Viscosity 1.4 cp @ 25 °C

10. STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

Possibility of hazardous reactions

Polymerization will not occur.

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

No data available
No data available
No data available
No data available

Skin corrosion/irritation

Irritating to skin and mucous membranes.

Serious eye damage/eye irritation

Irritant effect.

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 No data available
Repeated exposure No data available

Aspiration Hazard

No data available

Potential Health Effects**Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Ingestion

May be harmful if swallowed.

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Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic Effects	No data available
Additional Information	No data available

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 non-recyclable solutions to a licensed disposal company. Contact Fluorox Inc. 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	This product does not contain components listed on the Canadian NDSL list.
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.

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16. OTHER INFORMATION

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