

# **SAFETY DATA SHEET**

Revision Date 30-March-2024 Revision Number 4

1. Identification

Product Name Glycidyl 2,2,3,3-tetrafluoropropyl ether

Cat No.: H53508

CAS-No 19932-26-4

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

### Company

## Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6, Canada

Tel: 1-800-234-7437

# **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

# 2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Flammable liquids Category 4

Label Elements

Signal Word

Warning

**Hazard Statements** 

Combustible liquid

### **Precautionary Statements**

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

### Glycidyl 2,2,3,3-tetrafluoropropyl ether

Wear protective gloves/protective clothing/eye protection/face protection

Response

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Storage

Store in a well-ventilated place. Keep cool

**Disposal** 

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
[(2,2,3,3-Tetrafluoropropoxy)methyl]oxirane	19932-26-4	<=100

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

**Flash Point** 79 °C / 174.2 °F

Method - No information available

**Autoignition Temperature** 

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Combustible material. Containers may explode when heated.

#### **Hazardous Combustion Products**

None known.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health Flammability Instability Physical hazards

## 6. Accidental release measures

**Personal Precautions** 

**Environmental Precautions** 

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Remove all sources of ignition. **Up** 

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition.
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

## 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** 

None under normal use conditions. Ensure adequate ventilation, especially in confined

areas.

## Personal protective equipment

**Eye Protection** 

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Hand Protection** 

Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter

## **Environmental exposure controls**

No information available.

### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

# 9. Physical and chemical properties

Physical State Liquid Appearance Clear

OdorNo information availableOdor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

Melting Point/RangeNo data availableBoiling Point/Range50 °C / 122 °FFlash Point79 °C / 174.2 °FEvaporation RateNo information availableFlammability (solid,gas)Not applicable

Flammability or explosive limits

Upper No data available

LowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 1.327 g/cm3

Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular FormulaC6 H8 O2 F4Molecular Weight188.12

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

Product Information Component Information

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

### Carcinogenicity

**Teratogenicity** 

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
[(2,2,3,3-Tetrafluoropr	19932-26-4	Not listed				
opoxy)methyl]oxirane						

**Mutagenic Effects** No information available

No information available. **Reproductive Effects** No information available. **Developmental Effects** 

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard** 

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting delayed

No information available.

**Endocrine Disruptor Information** 

No information available

Other Adverse Effects

The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Do not empty into drains.

Persistence and Degradability Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

Will likely be mobile in the environment due to its volatility. Mobility

## 13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# Transport information

COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY DOT

According to 49 CFR §173.150(f)(1), this material should reclassified as NA1993,

Combustible Liquid, NOS if it is shipped in bulk.

**UN-No** NA1993

**Proper Shipping Name** Combustible liquid, n.o.s.

**Packing Group** 

Not regulated TDG **IATA** Not regulated IMDG/IMO Not regulated

# 15. Regulatory information

### International Inventories

ſ	Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory	EINECS	ELINCS	NLP
-						notification -			

### Glycidyl 2,2,3,3-tetrafluoropropyl ether

					Active-Inactive			
[(2,2,3,3-Tetrafluoropropoxy)methy	19932-26-4	-	-	-	=	243-431-1	-	-
l]oxirane								

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
[(2,2,3,3-Tetrafluoropropoxy)methy	19932-26-4	-	-	-	-	-	-	-	-
l]oxirane									

### Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

### **Other International Regulations**

Authorisation/Restrictions according to EU REACH

Not applicable

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
[(2,2,3,3-Tetrafluoropropoxy) methyl]oxirane	19932-26-4	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
[(2,2,3,3-Tetrafluoropropoxy) methyl]oxirane	19932-26-4	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 30-March-2024 Print Date 30-March-2024

**Revision Summary** New emergency telephone response service provider.

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**