

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 21233B5 Issue date: 3/2/2017 Revision date: 11/14/2022 Version: 1.1

SECTION 1: Identification 1.1. Identification Product form : Substance Substance name 3,3,3-Trifluoropropylene carbonate : CAS-No. : 167951-80-6 Product code : 2123-3-B5 Formula : C4H3F3O3 Synonyms : 4-(Trifluoromethyl)-1,3-dioxolan-2-one Other means of identification : MFCD02183522 1.2. Recommended use and restrictions on use Use of the substance/mixture : Laboratory chemicals Manufacture of substances Scientific research and development 1.3. Supplier SynQuest Laboratories, Inc. Inc. P.O. Box 309 Alachua, FL, Alachua, 32615 United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com 1.4. Emergency telephone number Emergency number : (844) 523-4086 (3E Company - Account 10069) SECTION 2: Hazard(s) identification 2.1. Classification of the substance or mixture **GHS US classification**

Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity – Single exposure, Category 3,	H335	May cause respiratory irritation
Respiratory tract irritation		

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H315 - Causes skin irritation
	H319 - Causes serious eye irritation
	H335 - May cause respiratory irritation
Precautionary statements (GHS US)	: P261 - Avoid breathing fumes, mist, spray, vapors.
	P264 - Wash skin thoroughly after handling

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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 person to fresh air and keep 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
P321 - Specific treatment (see supplemental first aid instructions on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS US classification
3,3,3-Trifluoropropylene carbonate (Main constituent)	CAS-No.: 167951-80- 6	≤ 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and effective states and effective symptoms and effective symp	ffects (acute and delayed)
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2)

and/or in section 11.

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishing	media	
Suitable extinguishing media	: Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.	
5.2. Specific hazards arising from the chemi	ical	
Fire hazard Explosion hazard	 Thermal decomposition generates: Carbon oxides. Hydrogen fluoride. Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers. 	
5.3. Special protective equipment and preca	utions for fire-fighters	
Firefighting instructions Protection during firefighting	 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection". 	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective	equipment and emergency procedures	
General measures	: Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fumes, vapor or spray.	
6.1.1. For non-emergency personnel		
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.	

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up		
For containment	: Stop leak if safe to do so. Dike for recovery or absorb with appropriate material.	
Methods for cleaning up	: Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion- proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area.	
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".	
6.4. Reference to other sections		

No additional information available

6.2. Environmental precautions

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Ĵ	 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. 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.
7.2. Conditions for safe storage, including an	ny incompatibilities
Storage conditions Incompatible materials	 Comply with applicable regulations. Keep container closed when not in use. Moisture sensitive. Keep contents under inert gas. Refer to Section 10 on Incompatible Materials. Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

3,3,3-Trifluoropropylene carbonate (167951-80-6)	
No additional information available	
8.2. Appropriate engineering controls	
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.

8.3. Individual protection measures/Personal protective equipment

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

Personal protective equipment symbol(s):



Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

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SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and cl	iemical properties	
Physical state	: Liquid	
Appearance	: Low melting solid.	
Color	: No data available	
Odor	: No data available	
Odor threshold	: No data available	
рН	: No data available	
Melting point	: 17.5 °C	
Freezing point	: No data available	
Boiling point	: 85 – 86 °C (@ 12 mm Hg)	
Flash point	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: No data available	
Molecular mass	: 156.06 g/mol	
Solubility	: No data available	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosion limits	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep away from heat, sparks and flame.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

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11.1. Information on toxicological	effects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2 and/or in section 11.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

Product/Packaging disposal recommendations Additional information

- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.
 Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Recycle the material as far as possible.

SECTION 14: Transport information

14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable 	
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	: Not applicable	
TDG Transport hazard class(es) (TDG)	: Not applicable	
IMDG Transport hazard class(es) (IMDG)	: Not applicable	
IATA Transport hazard class(es) (IATA)	: Not applicable	
14.4. Packing group		
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable Not applicable 	
14.5. Environmental hazards		
Other information	: No supplementary information available.	
14.6. Special precautions for user		
DOT No data available		
TDG No data available		
IMDG No data available		
IATA No data available		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Not applicable		
SECTION 15: Regulatory information		
15.1. US Federal regulations		
All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act		

(TSCA) inventory, except for:

3,3,3-Trifluoropropylene carbonate

CAS-No. 167951-80-6

100%

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Full text of H-phrases		
H315	Causes skin irritation	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	
NFPA health hazar NFPA fire hazard NFPA reactivity	:	 3 - Materials that, under emergency conditions, can cause serious or permanent injury. 1 - Materials that must be preheated before ignition can occur. 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating Health Flammability Physical	:	 2 Moderate Hazard - Temporary or minor injury may occur 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB) 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.

Safety Data Sheet (SDS), USA

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.