

Safety Data Sheet 2921312 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 10/02/2015 Version: 1.0

SECTION 1: Identification		
1.1. Identification		
Product form : Substance		
Substance name	: 2-Fluoro-3-(trifluoromethyl)cinnamic acid	
CAS No	: 237069-83-9	
Product code	: 2921-3-12	
Formula	: C10H6F4O2	
Other means of identification	: MFCD00236291	
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against	
Use of the substance/mixture	: Laboratory chemicals Manufacture of substances Scientific research and development	
1.3. Details of the supplier of the safety of	data sheet	
SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com	<u>n</u>	
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 m	ixture	
Classification (GHS-US)		
Skin Irrit. 2 H315 - Causes skin irritation		
Eye Irrit. 2A H319 - Causes serious eye irritat STOT SE 3 H335 - May cause respiratory irrit		
Full text of H-phrases: see section 16		
2.2 Label elemente		
2.2. Label elements		
GHS-US labeling		
Hazard pictograms (GHS-US)	GHS07	
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)	<ul> <li>P261 - Avoid breathing dust, mist</li> <li>P264 - Wash skin thoroughly after handling</li> <li>P271 - Use only outdoors or in a well-ventilated area</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection</li> <li>P302+P352 - If on skin: Wash with plenty of soap and water</li> <li>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing</li> <li>P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P312 - Call a POISON CENTER or doctor/physician if you feel unwell</li> <li>P321 - Specific treatment (see supplemental first aid instructions on this label)</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse</li> <li>P403+P233 - Store in a well-ventilated place. Keep container tightly closed</li> <li>P405 - Store locked up</li> <li>P501 - Dispose of contents/container to an approved waste disposal plant</li> </ul>	

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2.3. Other hazards				
2.3. Other hazards No additional information available				
2.4. Unknown acute toxicity (GHS US)				
Not applicable				
SECTION 3: Composition/informati	on on in	aredients		
3.1. Substance				
Substance type	: Mono	o-constituent		
Name		Product identifier	%	Classification (GHS-US)
2-Fluoro-3-(trifluoromethyl)cinnamic acid		(CAS No) 237069-83-9	<b>78</b>	Skin Irrit, 2, H315
(Main constituent)				Eye Irrit. 2A, H319 STOT SE 3, H335
Full text of H-phrases: see section 16				
3.2. Mixture				
Not applicable				
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general		se of accident or if you feel unwell, se e possible). Move the affected perso		
First-aid measures after inhalation		ove person to fresh air and keep corr ration. Get medical advice/attention.	fortable for breath	ing. If not breathing, give artificial
First-aid measures after skin contact		n with plenty of soap and water. Get		
First-aid measures after eye contact		ediately flush eyes thoroughly with wa ent and easy to do. Continue rinsing.		
First-aid measures after ingestion		OT induce vomiting. Never give anyt h out with water. Get medical advice		an unconscious person. Rinse
4.2. Most important symptoms and effe	ects, both	acute and delayed		
Symptoms/injuries		most important known symptoms and and/or in section 11.	effects are descri	bed in the labelling (see section
4.3. Indication of any immediate medic	al attentio	on and special treatment needed		
4.3. Indication of any immediate medic Treat symptomatically.	al attentic	on and special treatment needed		
Treat symptomatically.	al attentic	on and special treatment needed		
Treat symptomatically. SECTION 5: Firefighting measures	al attentio	on and special treatment needed		
Treat symptomatically. SECTION 5: Firefighting measures 5.1. Extinguishing media	: Alcol	nol resistant foam. Carbon dioxide. D	ry powder. Water :	spray. Use extinguishing media
Treat symptomatically.         SECTION 5: Firefighting measures         5.1.       Extinguishing media         Suitable extinguishing media	: Alcol appro	nol resistant foam. Carbon dioxide. D opriate for surrounding fire.	ry powder. Water	spray. Use extinguishing media
Extinguishing media         5.1.       Extinguishing media         Suitable extinguishing media         5.2.       Special hazards arising from the statements	: Alcol appro ubstance	nol resistant foam. Carbon dioxide. D opriate for surrounding fire.		
Section 5: Firefighting measures         5.1.       Extinguishing media         Suitable extinguishing media         5.2.       Special hazards arising from the s         Fire hazard	: Alcol appro ubstance	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture		
Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters	: Alcol appro ubstance : Ther : Do n	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture	n oxides. Hydroge ble protective equ	n fluoride.
Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting	: Alcol appro ubstance : Thern : Do n refer	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita	n oxides. Hydroge ble protective equ	n fluoride.
Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting         SECTION 6: Accidental release measures	: Alcol appro ubstance : Then : Do n refer asures	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita to section 8: "Exposure controls/pers	n oxides. Hydroge ble protective equ	n fluoride.
Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting         SECTION 6: Accidental release measures         6.1. Personal precautions, protective explanation	: Alcol appro ubstance : Thern : Do n refer asures equipment : Evac	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita to section 8: "Exposure controls/pers	n oxides. Hydroge ble protective equ onal protection".	n fluoride. ipment. For further information
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Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting         SECTION 6: Accidental release measures         6.1. Personal precautions, protective e         General measures         6.1.1. For non-emergency personnel         Emergency procedures	: Alcol appro ubstance : Then : Do n refer asures equipment : Evac breat	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita to section 8: "Exposure controls/pers and emergency procedures uate unnecessary personnel. Ensure the dust.	n oxides. Hydroge ble protective equ onal protection". adequate air vent	n fluoride. ipment. For further information ilation. Avoid raising dust. Do not
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Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting         SECTION 6: Accidental release med         6.1. Personal precautions, protective e         General measures         6.1.1. For non-emergency personnel         Emergency procedures         6.1.2. For emergency responders         Protective equipment	: Alcol appro ubstance : Then : Do n refer asures equipment : Evac breat : Only : Do n	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita to section 8: "Exposure controls/pers and emergency procedures uate unnecessary personnel. Ensure the dust. qualified personnel equipped with su	n oxides. Hydroge ble protective equ onal protection". adequate air vent itable protective e	n fluoride. ipment. For further information ilation. Avoid raising dust. Do not quipment may intervene.
Treat symptomatically.         SECTION 5: Firefighting measures         5.1. Extinguishing media         Suitable extinguishing media         Suitable extinguishing media         5.2. Special hazards arising from the s         Fire hazard         5.3. Advice for firefighters         Protection during firefighting         SECTION 6: Accidental release measures         6.1. Personal precautions, protective e         General measures         6.1.1. For non-emergency personnel         Emergency procedures         6.1.2. For emergency responders         Protective equipment         6.2. Environmental precautions	: Alcol appro ubstance : Thern : Do n refer asures equipment : Evac breat : Only : Do n refer	nol resistant foam. Carbon dioxide. D opriate for surrounding fire. or mixture mal decomposition generates: Carbo ot attempt to take action without suita to section 8: "Exposure controls/pers and emergency procedures uate unnecessary personnel. Ensure the dust. qualified personnel equipped with su ot attempt to take action without suita to section 8: "Exposure controls/pers	n oxides. Hydroge ble protective equ onal protection". adequate air vent itable protective e	n fluoride. ipment. For further information ilation. Avoid raising dust. Do not quipment may intervene.
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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	No additional information available			
SECTION 7: Handling and storage				
7.1. Precautions for safe handling				
Precautions for safe handling	<ul> <li>Ensure good ventilation of the work station. Do not breathe dust. Avoid raising dust. Wear personal protective equipment. Avoid contact with skin and eyes.</li> </ul>			
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.			
7.2. Conditions for safe storage, including any incompatibilities				
Storage conditions	: Keep container tightly closed.			
Incompatible materials	: Refer to Section 10 on Incompatible Materials.			
Storage area	: Store in dry, cool, well-ventilated area.			

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
No additional information available			
8.2. Exposure 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.		
Hand protection	: Protective gloves.		
Eye protection	: Chemical goggles or safety glasses. Face shield.		
Skin and body protection	: Wear suitable protective clothing.		
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.		

: In case of insufficient ventilation, wear suitable	respiratory equipment.
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## **SECTION 9: Physical and chemical properties** 9.1

9.1. Information on basic physical an	d chemical properties	
Physical state	: Solid	
Color	: No data available	
Odor	: No data available	
Odor threshold	: No data available	
pH	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flammability (solid, gas)	: No data available	
Explosion limits	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Vapor pressure	: No data available	
Relative density	: No data available	
Relative vapor density at 20 °C	: No data available	
Molecular mass	: 234.15 g/mol	
Solubility	: No data available	
Log Pow	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	

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9.2.	Other information				
No addi	No additional information available				
SECT	ION 10: Stability and reactivity				
10.1.	Reactivity				
	tional information available				
10.2.	Chemical stability				
The product is stable at normal handling and storage conditions.					
10.3.	Possibility of hazardous reactions				
No addi	No additional information available				
10.4.	Conditions to avoid				
No additional information available					
10.5.	Incompatible materials				
Strong b	bases. Strong oxidizing agents.				
10.6.	Hazardous decomposition products				
l Inder n	ormal conditions of storage and use bazardous decomposition products should not be produced. Hazardous decomposition products in case of				

roduced. Haz ardous decomp fire, see Section 5.

SECTION 11: Toxicological information		
11.1.	Information on toxicological effects	

Acute toxicity	: 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
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

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 consideration	ons	
3.1. Waste treatment methods		
Vaste treatment methods	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.	
Vaste disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	

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## **SECTION 14: Transport information**

## **Department of Transportation (DOT)**

In accordance with DOT

Not regulated for transport

### TDG

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

2-Fluoro-3-(trifluoromethyl)cinnamic acid

CAS No 237069-83-9 100%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 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 and/or reproductive harm

> medical attention is given. : 0 - Materials that will not burn.

and are not reactive with water.

## **SECTION 16: Other information**

#### Full text of H-phrases:

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

: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt

: 0 - Normally stable, even under fire exposure conditions,

NFPA health hazard

NFPA fire hazard	
NFPA reactivity	

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HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard - Materials that will not burn
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.

SDS US (GHS HazCom 2012)

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.