

5-(Triethoxysilyl)pentanoic acid Safety Data Sheet 6183170T according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/10/2018 Version: 1.0

SECTION 1: Identification			
1.1. Identification			
Product form	: Substance		
Substance name	: 5-(Triethoxysilyl)pentanoic acid		
CAS No : 1137665-94-1			
Product code			
Formula	: C11H24O5Si		
Other means of identification	: MFCD29067261		
1.2. Relevant identified uses of the subs	stance 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	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.co	<u>m</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 n	nixture		
Classification (GHS-US)			
Skin Irrit. 2 H315 - Causes skin irritation			
Eye Irrit. 2A H319 - Causes serious eye irrita STOT SE 3 H335 - May cause respiratory irr			
Full text of H-phrases: see section 16			
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)	 P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin 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 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 		

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2.3. Other hazards				
No additional information available				
2.4. Unknown acute toxicity (GHS US)				
lot applicable				
SECTION 3: Composition/information	on on ingree	dients		
.1. Substance				
Substance type	: Mono-cons	stituent		
Name	Pro	oduct identifier	%	Classification (GHS-US)
5-(Triethoxysilyl)pentanoic acid (Main constituent)	(CA	S No) 1137665-94-1	<= 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
ull text of H-phrases: see section 16	·		·	<u>.</u>
.2. Mixture				
lot applicable				
ECTION 4: First aid measures				
.1. Description of first aid measures				
ïrst-aid measures general				ce immediately (show the label
int old moonuron often inholation	•	sible). Move the affected pers	,	
irst-aid measures after inhalation	respiration	. Get medical advice/attentio	n.	thing. If not breathing, give artificial
irst-aid measures after skin contact		plenty of soap and water. Ge		
irst-aid measures after eye contact	present an	nd easy to do. Continue rinsin	ig. Get medical advi	
irst-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.				
	mouthout	with water. Get medical advis	ce/attention.	
	cts, both acute	e and delayed		
Symptoms/injuries	tts, both acute The most i 2.2) and/o	e and delayed important known symptoms a r in section 11.	and effects are desc	ribed in the labelling (see section
Symptoms/injuries	tts, both acute The most i 2.2) and/o	e and delayed important known symptoms a r in section 11.	and effects are desc	ribed in the labelling (see section
Symptoms/injuries 3. Indication of any immediate medica reat symptomatically. SECTION 5: Firefighting measures	tts, both acute The most i 2.2) and/o	e and delayed important known symptoms a r in section 11.	and effects are desc	ribed in the labelling (see section
Symptoms/injuries .3. Indication of any immediate medica reat symptomatically. SECTION 5: Firefighting measures .1. Extinguishing media	 cts, both acute The most i 2.2) and/or al attention and Alcohol res 	e and delayed important known symptoms a r in section 11. d special treatment needed	and effects are desc	ribed in the labelling (see section
Symptoms/injuries .3. Indication of any immediate medica Treat symptomatically. SECTION 5: Firefighting measures .1. Extinguishing media Suitable extinguishing media	 cts, both acute The most i 2.2) and/or attention and attention and Alcohol reading Alcohol reading Alcohol reading bstance or mi 	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire.	and effects are desc	r spray. Use extinguishing media
Symptoms/injuries	 cts, both acute The most i 2.2) and/or al attention and Alcohol responsive Alcohol responsive Alcohol responsive Alcohol responsive Thermal descent acute 	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. ixture ecomposition generates: Car	and effects are desc Dry powder. Water bon oxides. Silicon	r spray. Use extinguishing media oxides.
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Symptoms/injuries	 cts, both acute The most in 2.2) and/or and attention and attention and attention and appropriate chick appropriate chic	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. ixture ecomposition generates: Car plosion if heated under confin	and effects are desc Dry powder. Water bon oxides. Silicon tement. Use water s	r spray. Use extinguishing media oxides. spray or fog for cooling exposed e risk of explosion.
Symptoms/injuries .3. Indication of any immediate medical reat symptomatically. SECTION 5: Firefighting measures .1. Extinguishing media .2. Special hazards arising from the su ire hazard ixplosion hazard .3. Advice for firefighters irefighting instructions	 cts, both acute The most i 2.2) and/or attention and attention and Alcohol responsibility Alcoh	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. ixture ecomposition generates: Car plosion if heated under confin fire: Evacuate area. Fight fire tight chemically protective clo	and effects are desc Dry powder. Water bon oxides. Silicon hement. Use water s e remotely due to the othing in combinatio	r spray. Use extinguishing media oxides. spray or fog for cooling exposed
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Symptoms/injuries .3. Indication of any immediate medical reat symptomatically. SECTION 5: Firefighting measures .1. Extinguishing media .2. Special hazards arising from the su rire hazard .3. Advice for firefighters Protection during firefighting SECTION 6: Accidental release mea	 cts, both acute The most in 2.2) and/or 2.2) and/or 2.2) and/or 2.2 an	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. xture ecomposition generates: Car plosion if heated under confin fire: Evacuate area. Fight fire tight chemically protective clc . For further information refer	and effects are desc Dry powder. Water bon oxides. Silicon hement. Use water s e remotely due to the othing in combinatio	r spray. Use extinguishing media oxides. spray or fog for cooling exposed e risk of explosion. n with self contained breathing
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Symptoms/injuries	 cts, both acute The most i 2.2) and/or attention and appropriate bstance or mi Thermal de Risk of exp containers In case of Wear gas apparatus. SURES juipment and of Evacuate of vapor or sjoin 	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. xture ecomposition generates: Car plosion if heated under confin fire: Evacuate area. Fight fire tight chemically protective clo . For further information refer emergency procedures unnecessary personnel. Ensu	Ind effects are desc Dry powder. Water bon oxides. Silicon hement. Use water s e remotely due to the othing in combinatio to section 8: "Expos ure adequate air ver	r spray. Use extinguishing media oxides. spray or fog for cooling exposed e risk of explosion. m with self contained breathing sure controls/personal protection".
Symptoms/injuries	 cts, both acute The most i 2.2) and/or attention and appropriate bstance or mi Thermal de Risk of exp containers In case of Wear gas apparatus. SURES juipment and of Evacuate of vapor or sjoin 	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. ixture ecomposition generates: Carl plosion if heated under confin fire: Evacuate area. Fight fire tight chemically protective clo . For further information refer emergency procedures unnecessary personnel. Ensu- pray.	Ind effects are desc Dry powder. Water bon oxides. Silicon hement. Use water s e remotely due to the othing in combinatio to section 8: "Expos ure adequate air ver	r spray. Use extinguishing media oxides. spray or fog for cooling exposed e risk of explosion. m with self contained breathing sure controls/personal protection".
Symptoms/injuries	 cts, both acute The most i 2.2) and/or attention and attention and appropriate bstance or mi Thermal di Risk of exp containers In case of Wear gas apparatus. SURES Upment and of Evacuate of Vapor or sp Only qualified Do not atted 	e and delayed important known symptoms a r in section 11. d special treatment needed sistant foam. Carbon dioxide. e for surrounding fire. ixture ecomposition generates: Car plosion if heated under confin fire: Evacuate area. Fight fire tight chemically protective clo . For further information refer emergency procedures unnecessary personnel. Ensu- pray. fied personnel equipped with	and effects are desc Dry powder. Water bon oxides. Silicon hement. Use water s e remotely due to the othing in combinatio to section 8: "Expos ure adequate air ver suitable protective eq	r spray. Use extinguishing media oxides. spray or fog for cooling exposed e risk of explosion. In with self contained breathing sure controls/personal protection". Intilation. Do not breathe gas, fumes, equipment may intervene.

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6.2. Environmental precautions	Environmental precautions		
Avoid release to the environment. Notify at	uthorities if product enters sewers or public waters.		
6.3. Methods and material for conta	ainment 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			
SECTION 7: Handling and stora	ge		
7.1. Precautions for safe handling			
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.		
7.2. Conditions for safe storage, in	cluding any incompatibilities		
Technical measures	: Comply with applicable regulations.		
Storage conditions	: Keep container closed when not in use. Moisture sensitive. Keep contents under inert gas.		
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. 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.

SECTION 9: Physical and chemica	l properties		
9.1. Information on basic physical and	d chemical properties		
Physical state	: Liquid		
Color	: No data available		
Odor	: No data available		
Odor threshold	: No data available		
H	: 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		
/apor pressure	: No data available		
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Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Molecular mass	: 264.3908 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

9.2. **Other information**

No additional information available

SECT	ION 10: Stability and reactivity			
SECI	ION 10: Stability and reactivity			
10.1.	Reactivity			
No additional information available				
10.2.	Chemical stability			
The pro	duct is stable at normal handling and storage conditions.			
10.3.	Possibility of hazardous reactions			
No add	itional information available			
10.4.	Conditions to avoid			
Keep a	way from heat, sparks and flame.			
10.5.	Incompatible materials			
Strong	oxidizing agents.			
10.6.	Hazardous decomposition products			
	normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of escition 5.			

SECTION 11: Toxicological information				
11.1. Information on toxicologica	effects			
Acute toxicity	: Not classified			
Skin corrosion/irritation	: Causes skin irritation.			
Serious eye damage/irritation	: Causes serious eye irritation.			

Senous eye damaye/imtation	. Causes senous eye initation.
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

SECTI	ON 12: Ecological information
12.1.	Toxicity
No addit	ional information available
12.2.	Persistence and degradability
No addit	ional information available
12.3.	Bioaccumulative potential
No addit	ional information available

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal consider	ations	
13.1. Waste treatment methods		
Waste treatment methods Waste disposal recommendations Additional information	 Remove to an authorized incinerator equipped with Dispose of contents/container in accordance with Recycle the material as far as possible. 	-
SECTION 14: Transport informa	tion	
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 inform	ation	
15.1. US Federal regulations		
All components of this product are listed, Substances Control Act (TSCA) inventor	or excluded from listing, on the United States Environmenta / except for:	al Protection Agency Toxic
5-(Triethoxysilyl)pentanoic acid	CAS No 1137665-94-1	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

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

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NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 1 - Must be preheated before ignition can occur.
NFPA reactivity	: 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	: 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)
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.