

Safety Data Sheet 4157305 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 02/25/2016 Version: 1.0

: Substance
: 3,3,3-Trifluoro-DL-alanine
: 17463-43-3
: 4157-3-05
: C3H4F3NO2
: MFCD00004263
Ibstance or mixture and uses advised against
: Laboratory chemicals Manufacture of substances Scientific research and development
ty data sheet
a com
: (844) 523-4086 (3E Company - Account 10069)
on
r mixture
itation
itation irritation
:
: CHSO7
: Warning
 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation
 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling
 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray 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
 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray 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
 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray 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 P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse
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 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray 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 P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

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2.3. Other hazards				
No additional information available				
2.4. Unknown acute toxicity (GHS US)				
Not applicable				
SECTION 3: Composition/informati	on on in	gredients		
3.1. Substance				
Substance type	: Mono	o-constituent		
Name		Product identifier	%	Classification (GHS-US)
3,3,3-Trifluoro-DL-alanine (Main constituent)		(CAS No) 17463-43-3	<= 100	Skin Irrit. 2, H315 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	wher	se of accident or if you feel unwell, seek e possible). Move the affected personnel	away from the	contaminated area.
First-aid measures after inhalation	respi	ove person to fresh air and keep comforta ration. Get medical advice/attention.		
First-aid measures after skin contact		n with plenty of soap and water. Get med		
First-aid measures after eye contact	prese	ediately flush eyes thoroughly with water ent and easy to do. Continue rinsing. Get	medical advice	/attention.
First-aid measures after ingestion		OT induce vomiting. Never give anything h out with water. Get medical advice/atte		unconscious person. Rinse
4.2. Most important symptoms and effe	ects, both	acute and delayed		
Symptoms/injuries		most important known symptoms and effe and/or in section 11.	ects are describ	ed in the labelling (see section
4.3. Indication of any immediate medic	al attentio	n and special treatment needed		
Treat symptomatically.				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media		nol resistant foam. Carbon dioxide. Dry popriate for surrounding fire.	owder. Water sp	oray. Use extinguishing media
5.2. Special hazards arising from the s	ubstance	or mixture		
Fire hazard	: Ther	mal decomposition generates: Carbon ox	ides. Hydrogen	fluoride. Nitrogen oxides.
5.3. Advice for firefighters				
-irefighting instructions	: In ca	se of fire: Evacuate area.		
Protection during firefighting		r gas tight chemically protective clothing i ratus. For further information refer to sec		
SECTION 6: Accidental release me	asures			
6.1. Personal precautions, protective e	quipment	and emergency procedures		
General measures	: Evac	uate unnecessary personnel. Ensure ade	equate air ventil	ation. Do not breathe dust.
6.1.1. For non-emergency personnel				
Emergency procedures	: Only	qualified personnel equipped with suitab	le protective equ	uipment may intervene.
5.1.2. For emergency responders Protective equipment		ot attempt to take action without suitable to section 8: "Exposure controls/persona		oment. For further information
6.2. Environmental precautions				
Avoid release to the environment. Notify author	rities if proc	duct enters sewers or public waters.		
6.3. Methods and material for containn	nent and c	leaning up		
For containment		leak if safe to do so.		

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Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".
6.4. Reference to other sect	tions
No additional information available	
SECTION 7: Handling and	storage
7.4 Dressutiens fer sefe he	ndling
7.1. Precautions for safe ha	3
7.1. Precautions for safe ha 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 dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes.

		smoke when using this product. Always wash hands after handling the product.	
7.2.	7.2. Conditions for safe storage, including any incompatibilities		
Techn	ical measures	: Comply with applicable regulations.	
Storag	ge conditions	: Keep container closed when not in use.	
Incom	patible materials	: Refer to Section 10 on Incompatible Materials.	
Storag	ge 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 chemical properties

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	: 232 - 234 °C
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	: 143.06 g/mol
Solubility	: No data available
Log Pow	: No data available

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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	
SECTION 10: Stability and rea	ctivity
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 rea	ictions
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 p	products
Under normal conditions of storage and fire, see Section 5.	use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of
SECTION 11: Toxicological in	formation
11.1. Information on toxicologica	l 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

SECT	ON 12. Ecological information
SECT	ON 12: Ecological information
12.1.	Toxicity
No addi	ional information available
12.2.	Persistence and degradability
No addi	ional information available
12.3.	Bioaccumulative potential
No addi	ional information available
12.4.	Mobility in soil
No addi	ional information available
12.5.	Other adverse effects
No oddi	ional information available

No additional information available

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SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.	
Waste disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	
Additional information	: Recycle the material as far as possible.	

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:

3,3,3-Trifluoro-DL-alanine	CAS No 17463-43-3	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

3,3,3-Trifluoro-DL-alanine (17463-43-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

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	: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard	: 0 - Materials that will not burn.
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	: 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.