

Safety Data Sheet 8164311 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Version: 1.0

Date of issue: 06/04/2020

SECTION 1: Identification		
1.1. Identification		
Product form	: Substance	
Substance name	: Ammonium triflate	
CAS No	: 38542-94-8	
Product code	: 8164-3-11	
Formula	: CH4F3NO3S	
Synonyms	: Ammonium trifluoromethanesulfonate	
Other means of identification	: MFCD00075332	
1.2. Relevant identified uses of the s	substance 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 saf	fety data sheet	
SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of Americ T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs		
1.4. Emergency telephone number		
Emergency number	: (844) 523-4086 (3E Company - Account 10069)	
Eye Irrit. 2AH319 - Causes serious eye iSTOT SE 3H335 - May cause respirator	irritation	
Eye Irrit. 2A H319 - Causes serious eye i STOT SE 3 H335 - May cause respirator Full text of H-phrases: see section 16	irritation	
Eye Irrit. 2A H319 - Causes serious eye i STOT SE 3 H335 - May cause respirator Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	irritation	
Eye Irrit. 2A       H319 - Causes serious eye i         STOT SE 3       H335 - May cause respirator         Full text of H-phrases: see section 16         2.2.       Label elements         GHS-US labeling	irritation	
Eye Irrit. 2A H319 - Causes serious eye i STOT SE 3 H335 - May cause respirator Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	irritation ry irritation	
Eye Irrit. 2A H319 - Causes serious eye i STOT SE 3 H335 - May cause respirator Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	irritation ry irritation	
Eye Irrit. 2A H319 - Causes serious eye i STOT SE 3 H335 - May cause respirator Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	<ul> <li>irritation</li> <li>ry irritation</li> <li>: irritation</li> <li>: irritation</li> <li>: Warning</li> <li>: H315 - Causes skin irritation H319 - Causes serious eye irritation</li> </ul>	

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ccording to Federal Register / Vol. 77	r, No. 58 / Monday, March 26	, 2012 / Rules and Regulations		
2.3. Other hazards				
No additional information availa	ble			
2.4. Unknown acute toxi	city (GHS US)			
Not applicable				
SECTION 3: Compositio	n/information on in	gredients		
3.1. Substance				
Substance type	: Mono	o-constituent		
Name		Product identifier	%	Classification (GHS-US)
Ammonium triflate (Main constituent)		(CAS No) 38542-94-8	<= 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Full text of H-phrases: see secti	on 16			
3.2. Mixture				
Not applicable				
SECTION 4: First aid me	easures			
4.1. Description of first a	id measures			
First-aid measures general		se of accident or if you feel unwell, seek a possible). Move the affected personnel		
First-aid measures after inhalati		ove person to fresh air and keep comforta ration. Get medical advice/attention.	able for breathin	g. If not breathing, give artificial
First-aid measures after skin co		n with plenty of soap and water. Get med		
First-aid measures after eye cor	prese	ediately flush eyes thoroughly with water ent and easy to do. Continue rinsing. Get	medical advice/	attention.
First-aid measures after ingestic		OT induce vomiting. Never give anything h out with water. Get medical advice/atte		unconscious person. Rinse
4.2. Most important sym	ptoms and effects, both	acute and delayed		
Symptoms/injuries : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.				
4.3. Indication of any imi	mediate medical attentio	n and special treatment needed		
Treat symptomatically.				
SECTION 5: Firefighting	measures			
5.1. Extinguishing media	1			
Suitable extinguishing media		nol resistant foam. Carbon dioxide. Dry popriate for surrounding fire.	owder. Water sp	ray. Use extinguishing media
5.2. Special hazards aris	ing from the substance	or mixture		
Fire hazard	: Ther oxide	nal decomposition generates: Carbon ox s.	ides. Hydrogen	fluoride. Nitrogen oxides. Sulfur
5.3. Advice for firefighter	rs			
Firefighting instructions	: In ca	se of fire: Evacuate area.		
Protection during firefighting		gas tight chemically protective clothing i ratus. For further information refer to sec		
SECTION 6: Accidental				
		and emergency procedures		
General measures	: Evac	uate unnecessary personnel. Ensure ade	equate air ventila	ation. Do not breathe dust.
6.1.1. For non-emergency Emergency procedures		qualified personnel equipped with suitabl	e protective eau	lipment may intervene.
			,	
6.1.2. For emergency resp Protective equipment	: Do n	ot attempt to take action without suitable		ment. For further information
		to section 8: "Exposure controls/persona	protection.	
6.2. Environmental preca	autions			

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

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3. Methods and material for containment and cleaning up				
For containment	: Stop leak if safe to do so.			
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 sections				
No additional information available				
SECTION 7: Handling and storage				
7.4 Descentions for a fail and then				

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 dust, mist, spray. 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, inc	luding any incompatibilities
Technical measures	: Comply with applicable regulations.
Storage conditions	: Keep container closed when not in use. Hygroscopic. Keep contents under inert gas.
Incompatible materials	: Refer to Section 10 on Incompatible Materials.
Storage area	: Store in dry, cool, well-ventilated area.

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 chemical properties**

9.1. Information on basic physical	and chemical properties
Physical state	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Melting point	: 223 - 225 °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	: 167.108 g/mol

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

### **Other information** 9.2.

No additional information available

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. Moisture.   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.   SECTION 11: Toxicological information   11.1.   Information on toxicological effects   Acute toxicity	SECTION 40: Stability and recetivit	
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. Moisture.         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.         SECTION 11: Toxicological information         11.1.       Information on toxicological effects         Acute toxicity       : Not classified		ty
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. Moisture.         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.         SECTION 11: Toxicological information         11.1. Information on toxicological effects         Acute toxicity       : Not classified		
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. Moisture.   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.   SECTION 11: Toxicological information   11.1. Information on toxicological effects   Acute toxicity	No additional information available	
10.3. Possibility of hazardous reactions         No additional information available         10.4. Conditions to avoid         Keep away from heat, sparks and flame. Moisture.         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.         SECTION 11: Toxicological information         11.1. Information on toxicological effects         Acute toxicity       : Not classified	10.2. Chemical stability	
No additional information available          10.4.       Conditions to avoid         Keep away from heat, sparks and flame. Moisture.         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.         SECTION 11: Toxicological information         11.1.       Information on toxicological effects         Acute toxicity       : Not classified	The product is stable at normal handling and s	storage conditions.
10.4. Conditions to avoid         Keep away from heat, sparks and flame. Moisture.         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.         SECTION 11: Toxicological information         11.1. Information on toxicological effects         Acute toxicity       : Not classified	10.3. Possibility of hazardous reactions	8
Keep away from heat, sparks and flame. Moisture.         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.         SECTION 11: Toxicological information         11.1.       Information on toxicological effects         Acute toxicity       : Not classified	No additional information available	
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.         SECTION 11: Toxicological information         11.1. Information on toxicological effects         Acute toxicity       : Not classified	10.4. Conditions to avoid	
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.  SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified	Keep away from heat, sparks and flame. Moist	ture.
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.         SECTION 11: Toxicological information         11.1. Information on toxicological effects         Acute toxicity       : Not classified	10.5. Incompatible materials	
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of section 5.  SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified	Strong oxidizing agents.	
SECTION 11: Toxicological information         11.1.       Information on toxicological effects         Acute toxicity       : Not classified	10.6. Hazardous decomposition produc	ts
Information on toxicological effects         Acute toxicity       : Not classified	Under normal conditions of storage and use, h fire, see Section 5.	nazardous decomposition products should not be produced. Hazardous decomposition products in case of
Acute toxicity : Not classified	<b>SECTION 11: Toxicological inform</b>	ation
	11.1. Information on toxicological effec	ts
	Acute toxicity	: Not classified
Skin corrosion/irritation : Causes skin irritation.	Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.	Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization : Not classified	Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity : Not classified	Germ cell mutagenicity	: Not classified
Carcinogenicity : Not classified	Carcinogenicity	: Not classified

Reproductive toxicity	: Not classified

Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
--	-------------------------------------

### Specific target organ toxicity (repeated : Not classified exposure)

## 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			
12.4.	Mobility in soil			
No addit	ional information available			
12.5.	Other adverse effects			
No additional information available				
06/04/202	20	EN (English US)	SDS ID: 8164311	4/6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>SECTION 13: Disposal consideration</b>	S	
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.	
<b>SECTION 14: Transport information</b>		
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:		
Ammonium triflate	CAS No 38542-94-8	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:

Serious eye damage/eye irritation Category 2A
Skin corrosion/irritation Category 2
Specific target organ toxicity (single exposure) Category 3
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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	: 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.