

# **3,5-Bis(trifluoromethyl)aniline** Safety Data Sheet 3830313 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/23/2019 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Substance
Substance name	: 3,5-Bis(trifluoromethyl)aniline
CAS No	: 328-74-5
Product code	: 3830-3-13
Formula	: C8H5F6N
Synonyms	: MBT-NH2; alpha,alpha,alpha,alpha',alpha',alpha'-Hexafluoro-3,5-xylidine, 5-Amino-
Synonyms	alpha,alpha,alpha,alpha,alpha',a
Other means of identification	: MFCD00000394
1.2. Relevant identified uses of the subst	ance 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 d	ata sheet
SynQuest Laboratories, Inc.	
P.O. Box 309	
Alachua, FL 32615 - United States of America	
T (386) 462-0788 - F (386) 462-7097 info@synguestlabs.com - www.synguestlabs.com	
1.4. Emergency telephone number	
Emergency number	: (844) 523-4086 (3E Company - Account 10069)
	. (044) 923 4000 (3E Company - Account 10003)
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or mi	xture
Classification (CHS US)	
Classification (GHS-US)	
Acute Tox. 4 (Oral) H302 - Harmful if swallowe Skin Irrit. 2 H315 - Causes skin irritatio	
Eye Dam. 1 H318 - Causes serious eye	
STOT SE 3 H335 - May cause respirat	ory irritation
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	
	GHS05 GHS07
Signal word (GHS-US)	GHS05 GHS07 : Danger
Signal word (GHS-US) Hazard statements (GHS-US)	
	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed</li> <li>H315 - Causes skin irritation</li> </ul>
	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed</li> <li>H315 - Causes skin irritation</li> <li>H318 - Causes serious eye damage</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed</li> <li>H315 - Causes skin irritation</li> <li>H318 - Causes serious eye damage</li> <li>H335 - May cause respiratory irritation</li> </ul>
	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed</li> <li>H315 - Causes skin irritation</li> <li>H318 - Causes serious eye damage</li> <li>H335 - May cause respiratory irritation</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell 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</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell 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</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell 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</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell 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 P310 - Immediately call a POISON CENTER or doctor/ physician</li> </ul>
Hazard statements (GHS-US)	<ul> <li>Danger</li> <li>H302 - Harmful if swallowed H315 - Causes skin irritation H315 - Causes skin irritation H318 - Causes serious eye damage H335 - May cause respiratory irritation</li> <li>P261 - Avoid breathing fumes, mist, spray, vapors P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a POISON CENTER or doctor/ physician if you feel unwell 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</li> </ul>
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- 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 Other hazards No additional information available Unknown acute toxicity (GHS US) Not applicable SECTION 3: Composition/information on ingredients Substance Substance type : Mono-constituent Product identifier % **Classification (GHS-US)** 3,5-Bis(trifluoromethyl)aniline (CAS No) 328-74-5 Acute Tox. 4 (Oral), H302 <= 100 (Main constituent) Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Full text of H-phrases: see section 16 **Mixture** Not applicable SECTION 4: First aid measures **Description of first aid measures** : In case of accident or if you feel unwell, seek medical advice immediately (show the label First-aid measures general where possible). Move the affected personnel away from the contaminated area. Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial First-aid measures after inhalation respiration. Get immediate medical advice/attention. First-aid measures after skin contact Wash with plenty of soap and water. Get immediate medical advice/attention. Immediately flush eves thoroughly with water for at least 15 minutes. Remove contact lenses, if First-aid measures after eye contact present and easy to do. Continue rinsing. Get immediate 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 immediate medical advice/attention. Most important symptoms 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. Indication of any immediate medical attention and special treatment needed Treat symptomatically. SECTION 5: Firefighting measures **Extinguishing media** Suitable extinguishing media : Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire. Special hazards arising from the substance or mixture Fire hazard : Thermal decomposition generates: Carbon oxides. Hydrogen fluoride. Nitrogen oxides. Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed Explosion hazard
- containers. 5.3. Advice for firefighters **Firefighting instructions** : 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 Protection during firefighting apparatus. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equ	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.		

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6.1.2. Fo	or emergency responders	
Protective ed	quipment	: 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.
6.2. Er	nvironmental precautions	
Avoid releas	se to the environment. Notify authoritie	s if product enters sewers or public waters.
6.3. M	ethods and material for containmer	nt and cleaning up
For containn	nent	: 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 inform	nation	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".
6.4. Re	eference to other sections	
No additiona	al information available	
SECTION	7: Handling and storage	
7.1. Pr	recautions 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 me	asures	: 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. Co	onditions for safe storage, including	g any incompatibilities
Technical m	easures	: Comply with applicable regulations.
Storage con	ditions	: Keep container closed when not in use.
Incompatible	e materials	: Refer to Section 10 on Incompatible Materials.
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**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: Phy	vsical and c	hemical r	bronerti	66
	ysical and c	nennear	noperu	63

9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 85 °C (@ 15 mm Hg)
Flash point	: 98 °C
Relative evaporation rate (butyl acetate=1)	: No data available

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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
Specific gravity / density	: 1.467 g/ml (@ 25 °C)
Molecular mass	: 229.1224 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
0.2 Other information	

#### Other information 9.2.

Refractive index

: 1.4335 (@ 20 °C)

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 acids. 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

: Oral: Harmful if swallowed.

3,5-Bis(trifluoromethyl)aniline (328-74-5)	
ATE US (oral)	500.000 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
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

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SECTIC	DN 12: Ecological information			
12.1.	Toxicity			
No additio	No additional information available			
12.2.	Persistence and degradability			
No additio	onal information available			
12.3.	Bioaccumulative potential			
No additional information available				
12.4.	Mobility in soil			
No additio	onal information available			
12.5.	Other adverse effects			
No additio	onal information available			

SECTION 13: Disposal considerat	ions
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.

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

**SECTION 14: Transport information** 

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: F	Regulator	v information

15.1. US Federal regulations

#### 3,5-Bis(trifluoromethyl)aniline (328-74-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

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

3,5-Bis(trifluoromethyl)aniline (328-74-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### National regulations

#### 3,5-Bis(trifluoromethyl)aniline (328-74-5)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

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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

	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
	Eye Dam. 1	Serious eye damage/eye irritation Category 1
	Skin Irrit. 2	Skin corrosion/irritation Category 2
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
	H302	Harmful if swallowed
	H315	Causes skin irritation
	H318	Causes serious eye damage
	H335	May cause respiratory irritation
NFPA fire		<ul> <li>3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.</li> <li>1 - Must be preheated before ignition can occur.</li> <li>0 - Normally stable, even under fire exposure conditions, and are not reactive with water.</li> </ul>
HMIS III	Rating	
Health		: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammat	bility	<ul> <li>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)</li> </ul>

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.