

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
US OSHA Hazard Communication Standard (29 CFR 1910.1200)



**Product Name** Fixed Trimethylamine Natural, 25% in Acetic Acid

## 1. Identification

### Product identifier

**Product Name** Fixed Trimethylamine Natural, 25% in Acetic Acid

### Other means of identification

**Chemical name** Trimethylamine

**Product Code(s)** NA3241-25

**UN number or ID number** 2924

### Recommended use of the chemical and restrictions on use

**Recommended use** Flavors

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Axxence Corporation  
1050 Cypress Creek Rd.  
Oakdale, La 71463  
www.axxence.com  
Tel. 318-215-1456  
Fax 318-335-1579

### Emergency telephone number

**Emergency Telephone** EMERGENCY 24 HOUR CONTACT  
ChemTrec: 1-800-424-9300  
Contract # 219030

## 2. Hazard(s) identification

### Classification

Classification according to Regulation 29 CFR 1910.1200

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

**Hazards not otherwise classified (HNOC)**

Not applicable.

**Label elements**

Danger

**Hazard statements**

Highly flammable liquid and vapor.

Harmful in contact with skin.

Harmful if inhaled.

Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

**Precautionary Statements - Prevention**

Use only outdoors or in a well-ventilated area.

Do not breathe dusts or mists.

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves/clothing and eye/face protection.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

Keep cool.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

Call a POISON CENTER or doctor if you feel unwell.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Unknown acute toxicity**

75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

**Other information**

### 3. Composition/information on ingredients

**Product Name** Fixed Trimethylamine Natural, 25% in Acetic Acid

**Substance**

Not applicable.

**Mixture**

**Formula** C<sub>3</sub>H<sub>9</sub>N

**Molecular weight** 59.11 g/mol

Chemical name	CAS No.	EC No (EU Index No)	Weight-%	Trade secret
Acetic Acid	64-19-7	200-580-7 (607-002-00-6)	75	-
Trimethylamine	75-50-3	200-875-0 (612-001-00-9)	25	-

### 4. First-aid measures

**Description of first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention. Immediate medical attention is required.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

### 5. Fire-fighting measures

**Flash point** 11 °C / 51.8 °F

**Flammability Limit in Air**

**Upper flammability or explosive limits** No data available

**Lower flammability or explosive limits** No data available

**Suitable Extinguishing Media****Large Fire****Unsuitable extinguishing media****Specific hazards arising from the chemical**

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

CAUTION: Use of water spray when fighting fire may be inefficient.

Do not scatter spilled material with high pressure water streams.

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** Yes.

**Special protective equipment and precautions for fire-fighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Special attention to fire and explosion**

None

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures****Personal precautions**

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material. Do not breathe vapor or mist. Avoid breathing vapors or mists.

**Other information**

Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

**Methods and material for containment and cleaning up****Methods for containment**

Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up**

Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards**

Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. Handling and storage****Precautions for safe handling****Advice on safe handling**

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Purge with Nitrogen after each opening. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e.,

pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Protect from moisture. Keep out of the reach of children. Store away from other materials.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Acetic Acid 64-19-7	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m <sup>3</sup>	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>
Trimethylamine 75-50-3	TWA: 5 ppm STEL: 15 ppm	(vacated) TWA: 10 ppm (vacated) TWA: 24 mg/m <sup>3</sup> (vacated) STEL: 15 ppm (vacated) STEL: 36 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 24 mg/m <sup>3</sup> STEL: 15 ppm STEL: 36 mg/m <sup>3</sup>

### Appropriate engineering controls

#### Engineering controls

Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tight sealing safety goggles. Face protection shield.

#### Hand protection

Wear suitable gloves. Impervious gloves.

#### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

#### Respiratory protection

Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless to light yellow
Odor	pungent, fish-like odor
Odor threshold	No information available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point	134.5 °C / 274.1 °F	None known
Flash point	11 °C / 51.8 °F	CC (closed cup)
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	

Vapor pressure	No data available	None known
Relative vapor density	>1.0	None known
Relative density	1.015 - 1.041	None known
Water solubility	Soluble in water	None known
Solubility(ies)	Alcohol, Oil, Propylene Glycol	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Refractive Index	1.414 - 1.418	

**Other information**

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	59.11 g/mol
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

**10. Stability and reactivity**

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Acids. Bases. Oxidizing agent.
Hazardous decomposition products	None known based on information supplied.

**11. Toxicological information****Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation. May cause irritation of respiratory tract. Harmful by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts. Harmful in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms	Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.
----------	--

**Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	2,299.30 mg/kg
ATEmix (dermal)	1,320.00 mg/kg
ATEmix (inhalation-gas)	2,440.45 ppm
ATEmix (inhalation-dust/mist)	4.30 mg/l
ATEmix (inhalation-vapor)	99,999.00 mg/l

#### Unknown acute toxicity

75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic Acid 64-19-7	= 3310 mg/kg ( Rat )	= 1060 mg/kg ( Rabbit )	= 11.4 mg/L ( Rat ) 4 h
Trimethylamine 75-50-3	= 1200 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	> 5.9 mg/L ( Rat ) 4 h

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye damage. Causes burns.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	Respiratory system, Eyes, Skin, Teeth.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetic Acid 64-19-7	-	LC50: =79mg/L (96h, Pimephales promelas) LC50: =75mg/L (96h, Lepomis macrochirus)	-	EC50: =65mg/L (48h, Daphnia magna)
Trimethylamine 75-50-3	EC50: =98.8mg/L (72h, Desmodesmus subspicatus) EC50: =74.2mg/L (96h, Desmodesmus subspicatus)	-	-	EC50: =139mg/L (48h, Daphnia magna Straus)

**Persistence and degradability** No information available.

**Bioaccumulation**

**PBT and vPvB assessment** No information available.

Chemical name	PBT and vPvB assessment
Acetic Acid	The substance is not PBT / vPvB PBT assessment does not apply
Trimethylamine	The substance is not PBT / vPvB PBT assessment does not apply

#### Component Information

Chemical name	Partition coefficient
---------------	-----------------------

Acetic Acid 64-19-7	-0.17
Trimethylamine 75-50-3	1.89

**Mobility in soil** No information available.

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

### 14. Transport information

#### DOT

UN number or ID number 2924  
 Proper shipping name Flammable liquid, corrosive, n.o.s. (Trimethylamine solution)  
 Transport hazard class(es) 3  
 Subsidiary hazard class 8  
 Packing group II  
 DOT Marine Pollutant NP

#### IATA

UN number or ID number 2924  
 UN proper shipping name Flammable liquid, corrosive, n.o.s. (Trimethylamine solution)  
 Transport hazard class(es) 3  
 Subsidiary hazard class 8  
 Packing group II

#### IMDG

UN number or ID number 2924  
 UN proper shipping name Flammable liquid, corrosive, n.o.s. (Trimethylamine solution)  
 Transport hazard class(es) 3  
 Subsidiary hazard class 8  
 Packing group II  
 Marine pollutant NP

### 15. Regulatory information

#### International Inventories

**TSCA** Listed

**DSL/NDSL** Listed  
**EINECS/ELINCS** Listed  
**ENCS** Listed  
**IECSC** Listed  
**KECL** Listed  
**PICCS** Listed  
**AIIC** Listed  
**NZIoC** Listed  
**Taiwan** Listed

**Legend:**



**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic Acid 64-19-7	5000 lb	-	-	X
Trimethylamine 75-50-3	100 lb	-	-	X

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Acetic Acid 64-19-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Trimethylamine 75-50-3	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

### US State Regulations

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Acetic Acid 64-19-7	X	X	X
Trimethylamine 75-50-3	X	X	X

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## **16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 3	<b>Flammability</b> 3	<b>Physical hazards</b> 0	<b>Personal protection</b> X

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision Number** 1  
**Revision date** 06-Jan-2025  
**Revision Note** No information available.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**