

**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

**1. Identification**

**Product Code** : 90716, 90051, 91837,91514  
**Company Name** : Advent Chembio Private Limited  
**Address** : W-288, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701.  
**E-mail** : [info@adventchembio.com](mailto:info@adventchembio.com)  
**WEBSITE** : [www.adventchembio.com](http://www.adventchembio.com)  
**Company Phone Number** : 022-27690837

**2. Composition/Information on Ingredients**

Ingredient	CAS No	Percent
TRIETHYLAMINE	121-44-8	100%

**3. Hazards Identification****Hazard classification****Physical hazards**

Flammable liquids : Category 2

**Health hazards**

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 3

Acute toxicity, inhalation, vapor : Category 3

Skin corrosion/irritation : Category 1

Serious eye damage/eye irritation : Category 1

Specific target organ toxicity -

single

exposure

**Labels elements****Hazard symbol****Signal word** : Danger**Hazard statement** : Highly flammable liquid and vapor.  
Harmful if swallowed.  
Toxic in contact with skin.

**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

Toxic if inhaled.  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.

**Precautionary statement****Prevention**

- : Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

**Response**

- : Specific treatment (see this label). IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Storage  
Disposal**

- : Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not  
result in GHS classification**

- : Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

**4. First Aid Measures****General information**

- : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.

**Ingestion**

- : Rinse mouth. Do NOT induce vomiting. Get medical attention if symptoms occur.

**Inhalation**

- : Move to fresh air. Get medical attention if symptoms persist.

**Skin contact**

- : Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical

**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

- attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing .
- Most important symptoms/effects, acute and delayed** : Toxic if inhaled. Toxic in contact with skin. Harmful if swallowed. Corrosive to skin and eyes.
- Indication of immediate medical attention and special treatment needed** : Treat symptomatically. Symptoms may be delayed.

**5. Fire fighting measures**

- General fire hazards** : In case of fire and/or explosion do not breathe fumes .
- Suitable (and unsuitable) extinguishing media**
- Suitable extinguishing media** : Water spray, foam, dry powder or carbon dioxide.
- Unsuitable extinguishing media** : Avoid water in straight hose stream; will scatter and spread fire.
- Specific hazards arising from the chemical** : Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Heat may cause the containers to explode.
- Special protective equipment and precautions for firefighters**
- Special fire fighting procedures** : Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.
- Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental Release Measures**

- Personal precautions, protective equipment and emergency procedures** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

**MATERIAL SAFETY DATA SHEET****Product Name:** Triethylamine**CAS No.:** 121-44-8**Version:** 1

- Methods and material for containment and cleaning up** : Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharges. Stop leak if possible without any risk. Use only non-sparking tools. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
- Notification Procedures** : Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.
- Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground .

**7. Handling and Storage**

- Precautions for safe handling** : DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Contact with air and light may form explosive peroxides. If peroxide formation is suspected, do not open or move container. Use personal protective equipment as required. Avoid breathing mists or vapors. Do not taste or swallow. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a cool, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

**8. Exposure Controls Personal Protection****Control parameters**

# MATERIAL SAFETY DATA SHEET

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

## Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
TRIETHYLAMINE	TWA	1 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	3 ppm	US. ACGIH Threshold Limit Values (2011)
	PEL	25 ppm    100 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	10 ppm    40 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	15 ppm    60 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

**Appropriate engineering controls** : No data available.

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

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

**Eye/face protection** : Wear safety glasses with side shields (or goggles) and a face shield.

**Hand protection** : Chemical resistant gloves.

**Other** : Wear suitable protective clothing.

**Respiratory protection** : In case of inadequate ventilation use suitable respirator.

**Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower .

## 9. Physical and Chemical Properties

**Appearance** : Colorless liquid.

**Odor** : Ammoniacal odor

**pH** : No data available.

**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

<b>Melting point/freezing point</b>	:	-115 °C
<b>Initial boiling point and boiling range</b>	:	90 °C
<b>Flash Point</b>	:	-9 °C
<b>Vapor pressure</b>	:	7.6 kPa (25 °C)
<b>Vapor density</b>	:	3.1 AIR=1
<b>Relative density</b>	:	3.49 AIR=1
<b>Solubility in water</b>	:	0.73 (25 °C)
<b>Solubility (other)</b>	:	55 g/l (20 °C)
<b>Formula</b>	:	C <sub>6</sub> H <sub>15</sub> N
<b>Molecular Weight</b>	:	101.19 g/mol

**10. Stability and Reactivity**

<b>Reactivity</b>	:	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	:	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	:	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	:	Heat, sparks, flames. Contact with incompatible materials.
<b>Incompatible materials</b>	:	No data available .
<b>Hazardous decomposition products</b>	:	Thermal decomposition may produce oxides of carbon and nitrogen.

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

<b>Ingestion</b>	:	Harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.
<b>Inhalation</b>	:	Toxic if inhaled.
<b>Skin contact</b>	:	Toxic in contact with skin. Causes skin burns.
<b>Eye contact</b>	:	Causes serious eye damage.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral Product</b>	:	LD 50 (Mouse): 546 mg/kg LD 50 (Rat): 460 mg/kg LD 50 (Rabbit): 365 mg/kg
<b>Dermal Product</b>	:	LD 50 (Rabbit): 416 mg/kg

**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

CAS No.: 121-44-8

Version: 1

<b>Inhalation Product</b>	:	LC 50 (Mouse, 2 h): 6 mg/l LC 50 (Rat, 2 h): 6 mg/l
<b>Repeated dose toxicity Product</b>	:	No data available.
<b>Skin corrosion/irritation Product</b>	:	Causes skin burns.
<b>Serious eye damage/eye irritation Product</b>	:	Causes serious eye damage.
<b>Respiratory or skin sensitization Product</b>	:	Not a skin sensitizer.
<b>Carcinogenicity Product</b>	:	This substance has no evidence of carcinogenic properties .
<b>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE</b>	:	No carcinogenic components identified.
<b>US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE</b>	:	No carcinogenic components identified.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 Germ cell mutagenicity</b>	:	No carcinogenic components identified.
<b>In vitro Product</b>	:	No mutagenic components identified.
<b>In vivo Product</b>	:	No mutagenic components identified.
<b>Reproductive toxicity Product</b>	:	No components toxic to reproduction
<b>Specific target organ toxicity - single exposure Product</b>	:	No data available.
<b>Specific target organ toxicity - repeated exposure Product</b>	:	No data available.
<b>Aspiration hazard Product</b>	:	Not classified
<b>Other effects</b>	:	None known.

**12. Ecological Information****Ecotoxicity****Acute hazards to the aquatic environment :**

<b>Fish Product</b>	:	No data available .
<b>Specified substance(s): TRIETHYLAMINE</b>	:	LC 50 (Zebra danio (Danio rerio), 7 d): 100 - 320 mg/l Mortality LC 50 (Medaka, high-eyes (Oryzias latipes), 48 h): 720 mg/l Mortality LC 50 (Rainbow trout,donaldson trout (Oncorhynchus

# MATERIAL SAFETY DATA SHEET

**Product Name:** Triethylamine

**CAS No.:** 121-44-8

**Version:** 1

- mykiss), 60 d): 126 - 150 mg/l Mortality
- Aquatic invertebrates Product** : No data available.
- Chronic hazards to the aquatic environment :**
- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.
- Toxicity to Aquatic Plants** : No data available.
- Product:**
- Persistence and degradability**
- Biodegradation Product** : There are no data on the degradability of this product
- BOD/COD ratio Product** : No data available.
- Bioaccumulative potential**
- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation .
- Partition coefficient n-octanol / water (log Kow) Product** : Log Kow: 1.45
- Mobility in soil** : No data available.
- Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## 13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws.
- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>	UN 1296	Triethylamine	3, 8	II	No
<b>IMDG</b>	UN 1296	Triethylamine	3, 8	II	No
<b>IATA</b>	UN 1296	Triethylamine	3, 8	II	No



**MATERIAL SAFETY DATA SHEET**

Product Name: Triethylamine

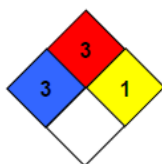
CAS No.: 121-44-8

Version: 1

**15. Regulatory Information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

**16. Other Information****NFPA Hazard ID**

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date :14/04/2016

Version : 1

***Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE***

**Product Name:** Triethylamine

**CAS No.:** 121-44-8

**Version:** 1

***HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).***