



# Qualikems Lifesciences Pvt. Ltd.

(Formerly known as Qualikems fine chem Pvt Ltd)

Works : Plot No. 68-69,G.I.D.C Industrial Estate,Nandesari,Vadodara-391340 (Gujarat)

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Product identifiers

Product name : **Triethylamine**

CAS-No. : 121-44-8

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

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

Company : Qualikems Lifesciences Pvt Ltd

Works : Plot No. 68.69,G.I.D.C  
Industrial Estate, Nandesari,  
Vadodara-391340 (Gujarat)

### Emergency telephone number

Emergency Phone # : +91-265-2841531 (9:00am - 6:30 pm) [Office hours]

## SECTION 2: Hazards identification

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1A), H314

Specific target organ toxicity - single exposure, Inhalation (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

F Highly flammable R11

C Corrosive R35

Xn Harmful R20/21/22

For the full text of the R-phrases mentioned in this Section, see Section 16.

### Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H311 + H331	Toxic in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard Statements	none

#### Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms	:	TEA
Formula	:	C <sub>6</sub> H <sub>15</sub> N
Molecular weight	:	101,19 g/mol
CAS-No.	:	121-44-8
EC-No.	:	204-469-4
Index-No.	:	612-004-00-5

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Triethylamine</b>		
CAS-No.	121-44-8	Flam. Liq. 2; Acute Tox. 4; Acute Tox. 3; Skin Corr. 1A; STOT SE 3; H225, H302, H311, H314, H331, H335
EC-No.	204-469-4	
Index-No.	612-004-00-5	

#### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
<b>Triethylamine</b>		
CAS-No.	121-44-8	F, C, R11 - R20/21/22 - R35
EC-No.	204-469-4	
Index-No.	612-004-00-5	

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## **SECTION 4: First aid measures**

### **Description of first aid measures**

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

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**

No data available

## **SECTION 5: Firefighting measures**

### **Extinguishing media Suitable**

#### **extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further information**

Use water spray to cool unopened containers.

## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### **Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids

#### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

##### **Components with workplace control parameters**

#### **Exposure controls**

##### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

##### **Personal protective equipment**

###### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

###### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

###### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

###### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **SECTION 9: Physical and chemical properties**

#### **Information on basic physical and chemical properties**

- |  |   |
|--|---|
| a) Appearance                              | Form: liquid, clear<br>Colour: colourless |
| b) Odour                                   | amine-like                                |
| c) Odour Threshold                         | No data available                         |
| d) pH                                      | 12,7 at 100 g/l at 15 °C                  |
| e) Melting point/freezing point            | Melting point/range: -115 °C              |
| f) Initial boiling point and boiling range | 88,8 °C                                   |

g) Flash point	-14,99 °C - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 8 %(V) Lower explosion limit: 1,2 %(V)
k) Vapour pressure	68,99 hPa at 20 °C 85,06 hPa at 30 °C
l) Vapour density	3,49 - (Air = 1.0)
m) Relative density	0,726 g/mL at 25 °C
n) Water solubility	112 g/l at 20 °C
o) Partition coefficient: n-octanol/water	log Pow: 1,15
p) Auto-ignition temperature	> 215 °C
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	The substance or mixture is not classified as oxidizing.

#### Other safety information

Surface tension	20,7 mN/m at 20 °C
Relative vapour density	3,49 - (Air = 1.0)

#### SECTION 10: Stability and reactivity

##### Reactivity

No data available

##### Chemical stability

Stable under recommended storage conditions.

##### Possibility of hazardous reactions

No data available

##### Conditions to avoid

Heat, flames and sparks.

##### Incompatible materials

Strong oxidizing agents

##### Hazardous decomposition products

Other decomposition products - No data available  
In the event of fire: see section 5

#### SECTION 11: Toxicological information

##### 11.1 Information on toxicological effects

###### Acute toxicity

LD50 Oral - Rat - 730 mg/kg  
(OECD Test Guideline 401)

LC50 Inhalation - Rat - 4 h - 7,1 mg/l  
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 580 mg/kg  
(OECD Test Guideline 402)

**Skin corrosion/irritation**

Skin - Rabbit

Result: Extremely corrosive and destructive to tissue.  
(OECD Test Guideline 404)**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Risk of serious damage to eyes.  
(OECD Test Guideline 405)**Respiratory or skin sensitisation**

in vivo assay - Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: YE0175000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system - Irregularities - Based on Human Evidence

**SECTION 12: Ecological information****Toxicity**

Toxicity to fish	LC50 - <i>Oryzias latipes</i> (Orange-red killifish) - 24 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	LC50 - <i>Daphnia dubia</i> (water flea) - 17 mg/l - 48 h
Toxicity to algae	NOEC - <i>Pseudokirchneriella subcapitata</i> (green algae) - 1,1 mg/l - 72 h (OECD Test Guideline 201) EC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 8 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	LC50 - Bacteria - 95 mg/l - 17 h

**Persistence and degradability**Biodegradability aerobic - Exposure time 28 d  
Result: 80 % - Readily biodegradable  
(OECD Test Guideline 301B)

**Bioaccumulative potential**

Bioaccumulation Cyprinus carpio (Carp) - 42 d

Bioconcentration factor (BCF): < 0,5  
(OECD Test Guideline 305C)

Remarks: Does not bioaccumulate.

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects**

Toxic to aquatic life.

No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****UN number**

ADR/RID: 1296

IMDG: 1296

IATA: 1296

**UN proper shipping name**

ADR/RID: TRIETHYLAMINE

IMDG: TRIETHYLAMINE

IATA: Triethylamine

**Transport hazard class(es)**

ADR/RID: 3 (8)

IMDG: 3 (8)

IATA: 3 (8)

**Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**Special precautions for user**

No data available

**SECTION 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

### Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity - single exposure

### Full text of R-phrases referred to under sections 2 and 3

C	Corrosive
F	Highly flammable
R11	Highly flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R35	Causes severe burns.

### Further information

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 applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Qualikems Lifesciences Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.qualikems.com](http://www.qualikems.com) for additional terms and conditions of sale.