

Creation Date Oct-2013 Revision Date Oct-2018 Revision Number 2

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identification

Product Description: <u>Triethylamine</u>
Product Grade: SQ, HPLC, ER

Cat No.: Q28585, Q43943, Q2868C

 Synonyms
 TETN

 CAS-No
 121-44-8

 EC-No.
 204-469-4

 Molecular Formula
 C6 H15 N

Reach Registration Number 01-2119475467-26

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

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

Company Thermo Fisher Scientific India Pvt. Ltd

403-404, B-wing, Delphi, Hiranandani Business Park,

Powai, Mumbai 400076, INDIA.

E-mail address laboratorysolutions@thermofisher.com

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30 Chemtrec US: (800)424-9300 Chemtrec EU: 001(202)483-7616

### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1. Classification of the substance or mixture

### CLP Classification - Regulation (EC) No 1272/2008

**Physical hazards** 

Flammable liquids Category 2

**Health hazards** 

Acute oral toxicityCategory 4Acute dermal toxicityCategory 3Acute Inhalation Toxicity - VaporsCategory 3Skin Corrosion/irritationCategory 1 ASerious Eye Damage/Eye IrritationCategory 1Specific target organ toxicity - (single exposure)Category 3

**Environmental hazards** 

Based on available data, the classification criteria are not met

### 2.2. Label elements



Signal Word Danger

#### **Hazard Statements**

H225 - Highly flammable liquid and vapor

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

#### **Precautionary Statements**

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position 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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

### 2.3. Other hazards

No information available

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Triethylamine	121-44-8	EEC No. 204-469-4	>95	Flam. Liq. 2 (H225) Acute Tox. 4 (H302) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1A (H314) Eye Dam. 1 (H318) STOT SE 3 (H335)

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Full text of Hazard Statements: see section 16

### **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

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**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is

required.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

#### 4.2. Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Breathing difficulties. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

### 4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

### Suitable Extinguishing Media

CO 2, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray.

### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx).

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

### 6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Do not breathe vapors or spray mist. Do not ingest. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Wash hands before breaks and immediately after handling the product.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area. Keep container tightly closed in a dry and well-ventilated place.

### 7.3. Specific end use(s)

Use in laboratories

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1. Control parameters

### **Exposure limits**

List source(s): **EU** - Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Triethylamine	TWA: 2 ppm 8 hr	STEL: 4 ppm 15 min	TWA / VME: 1 ppm (8	TWA: 1 ppm 8 uren	STEL / VLA-EC: 3 ppm
•	TWA: 8.4 mg/m <sup>3</sup> 8 hr	STEL: 17 mg/m <sup>3</sup> 15 min	heures). restrictive limit	TWA: 4.2 mg/m <sup>3</sup> 8 uren	(15 minutos). STEL /
	STEL: 3 ppm 15 min	TWA: 2 ppm 8 hr	TWA / VME: 4.2 mg/m <sup>3</sup>	STEL: 3 ppm 15	VLA-EC: 12.6 mg/m <sup>3</sup>
	STEL: 12.6 mg/m <sup>3</sup> 15	TWA: 8 mg/m <sup>3</sup> 8 hr	(8 heures). restrictive	minuten	(15 minutos). TWA /
	min	Skin	limit	STEL: 12.6 mg/m <sup>3</sup> 15	VLA-ED: 2 ppm (8
	Possibility of significant		STEL / VLCT: 3 ppm.	minuten	horas)
	uptake through the skin		restrictive limit	Huid	TWA / VLA-ED: 8.4
			STEL / VLCT: 12.6		mg/m³ (8 horas)
			mg/m <sup>3</sup> . restrictive limit		Piel
			Peau		

Component	Italy	Germany	Portugal	The Netherlands	Finland
Triethylamine	TWA: 2 ppm 8 ore. TWA: 8.4 mg/m³ 8 ore. STEL: 3 ppm 15 minuti. STEL: 12.6 mg/m³ 15 minuti. Pelle	TWA: 1 ppm (8 Stunden). AGW - exposure factor 2 TWA: 4.2 mg/m³ (8 Stunden). AGW - exposure factor 2 TWA: 1 ppm (8 Stunden). MAK TWA: 4.2 mg/m³ (8 Stunden). MAK Höhepunkt: 2 ppm Höhepunkt: 8.4 mg/m³ Haut	STEL: 3 ppm 15 minutos STEL: 12.6 mg/m³ 15 minutos TWA: 2 ppm 8 horas TWA: 8.4 mg/m³ 8 horas Pele	huid STEL: 12.6 mg/m³ 15 minuten TWA: 4.2 mg/m³ 8 uren	STEL: 1 ppm 15 minuutteina STEL: 4.2 mg/m³ 15 minuutteina Iho

Component	Austria	Denmark	Switzerland	Poland	Norway
Triethylamine	Haut	TWA: 1 ppm 8 timer	STEL: 2 ppm 15	STEL: 9 mg/m <sup>3</sup> 15	TWA: 2 ppm 8 timer

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MAI M	AK-KZW: 3 ppm 15 Minuten K-KZW: 12.6 mg/m³ 15 Minuten AK-TMW: 2 ppm 8 Stunden K-TMW: 8.4 mg/m³ 8 Stunden	TWA: 4.1 mg/m³ 8 timer Hud	Minuten STEL: 8.4 mg/m <sup>3</sup> 15 Minuten TWA: 1 ppm 8 Stunden TWA: 4.2 mg/m <sup>3</sup> 8 Stunden	minutach TWA: 3 mg/m³ 8 godzinach	TWA: 8 mg/m³ 8 timer STEL: 4 ppm 15 minutter. STEL: 16 mg/m³ 15 minutter. Hud
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Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Triethylamine	TWA: 2 ppm TWA: 8.4 mg/m³ STEL : 3 ppm STEL : 12.6 mg/m³ Skin notation	kože TWA-GVI: 2 ppm 8 satima. TWA-GVI: 8.4 mg/m³ 8 satima. STEL-KGVI: 3 ppm 15 minutama. STEL-KGVI: 12.6 mg/m³ 15 minutama.	TWA: 2 ppm 8 hr. TWA: 8.4 mg/m³ 8 hr. STEL: 3 ppm 15 min STEL: 12.6 mg/m³ 15 min Skin	Skin-potential for cutaneous absorption STEL: 3 ppm STEL: 12.6 mg/m³ TWA: 2.0 ppm TWA: 8.4 mg/m³	TWA: 8 mg/m³ 8 hodinách. Potential for cutaneous absorption Ceiling: 12 mg/m³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Triethylamine	Nahk TWA: 2 ppm 8 tundides. TWA: 8.4 mg/m³ 8 tundides. STEL: 3 ppm 15 minutites. STEL: 12.6 mg/m³ 15 minutites.	Skin notation TWA: 2 ppm 8 hr TWA: 8.4 mg/m³ 8 hr STEL: 3 ppm 15 min STEL: 12.6 mg/m³ 15 min	skin - potential for cutaneous absorption STEL: 15 ppm STEL: 60 mg/m³ TWA: 10 ppm TWA: 40 mg/m³	STEL: 12.6 mg/m³ 15 percekben. CK TWA: 8.4 mg/m³ 8 órában. AK lehetséges borön keresztüli felszívódás	STEL: 3 ppm STEL: 12.6 mg/m³ TWA: 2 ppm 8 klukkustundum. TWA: 8.4 mg/m³ 8 klukkustundum. Skin notation Ceiling: 4 ppm Ceiling: 16.8 mg/m³

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Triethylamine	STEL: 3 ppm STEL: 12.6 mg/m³ TWA: 2 ppm TWA: 8.4 mg/m³	TWA: 2 ppm IPRD TWA: 8.4 mg/m³ IPRD Oda STEL: 3 ppm STEL: 12.6 mg/m³	Possibility of significant uptake through the skin TWA: 2 ppm 8 Stunden TWA: 8.4 mg/m³ 8 Stunden STEL: 3 ppm 15 Minuten STEL: 12.6 mg/m³ 15 Minuten	uptake through the skin	Skin notation TWA: 2 ppm 8 ore TWA: 8.4 mg/m³ 8 ore STEL: 3 ppm 15 minute STEL: 12.6 mg/m³ 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Triethylamine	Skin notation	Ceiling: 12.6 mg/m <sup>3</sup>	TWA: 2 ppm 8 urah	STV: 10 ppm 15 minuter	Deri
·	MAC: 10 mg/m <sup>3</sup>	Potential for cutaneous	TWA: 8.4 mg/m <sup>3</sup> 8 urah	STV: 40 mg/m <sup>3</sup> 15	TWA: 2 ppm 8 saat
	_	absorption	Koža	minuter	TWA: 8.4 mg/m <sup>3</sup> 8 saat
		TWA: 2 ppm	STEL: 3 ppm 15	LLV: 2 ppm 8 timmar.	STEL: 3 ppm 15 dakika
		TWA: 8.4 mg/m <sup>3</sup>	minutah	LLV: 8 mg/m <sup>3</sup> 8 timmar.	STEL: 12.6 mg/m <sup>3</sup> 15
			STEL: 12.6 mg/m <sup>3</sup> 15		dakika
			minutah		

### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

Derived No Effect Level (DNEL)	No information available	:		
Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation				

Predicted No Effect Concentration No information available. (PNEC)

### 8.2. Exposure controls

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	< 60 minutes	0.38 mm	EN 374 Level 3	Permeation rate ~ 2000 µg/cm2/min
				As tested under EN374-3 Determination of
				Resistance to Permeation by Chemicals

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Ammonia and organic ammonia derivatives filter Type K

Green conforming to EN14387

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** Prevent product from entering drains.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1. Information on basic physical and chemical properties

AppearanceColorlessPhysical StateLiquid

**Odor** Fishy

Odor Threshold No data available

**pH** 12.4 (10 %)

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**Melting Point/Range** -115 °C / -175 °F **Softening Point** No data available **Boiling Point/Range** 90 °C / 194 °F Flash Point -11 °C / 12.2 °F

Method - No information available

(Butyl Acetate = 1.0) **Evaporation Rate** 5.6 Liquid

Flammability (solid,gas) Not applicable

**Explosion Limits** Lower 1.2 vol% **Upper** 8.8 vol%

69 mbar @ 20 °C

3.5 (Air = 1.0)**Vapor Density** 

0.728 Specific Gravity / Density

Not applicable Liquid **Bulk Density** 

133 g/L (20°C) Water Solubility

No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

Component log Pow Triethylamine 1.45

215 °C / 419 °F **Autoignition Temperature** No data available **Decomposition Temperature** 0.36 mPa.s @ 20 °C **Viscosity** 

No information available **Explosive Properties** Vapors may form explosive mixtures with air

No information available **Oxidizing Properties** 

9.2. Other information

**Vapor Pressure** 

Molecular Formula C6 H15 N **Molecular Weight** 101.19

### **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity None known, based on information available

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong reducing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

**Product Information** 

(a) acute toxicity;

Oral Category 4 **Dermal** Category 3 Inhalation Category 3

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Triethylamine 460 mg/kg (Rat) 415 mg/kg (Rabbit) 1250 ppm (Rat) 4 h

(b) skin corrosion/irritation; Category 1 A

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Based on available data, the classification criteria are not met Respiratory Skin Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

No information available. **Target Organs** 

(i) aspiration hazard; Based on available data, the classification criteria are not met

delayed

Symptoms / effects,both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Inhalation of high vapor concentrations may cause symptoms like headache,

dizziness, tiredness, nausea and vomiting

### **SECTION 12: ECOLOGICAL INFORMATION**

### 12.1. Toxicity

Do not empty into drains. **Ecotoxicity effects** 

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Triethylamine	Oryzias latipes: LC50 =	EC50 = 200 mg/L/48h		EC50 = 127 mg/L/2 h
-	50.7 mg/L/48h			EC50 = 95 mg/L/17 h

12.2. Persistence and degradability

Readily biodegradable **Persistence** 

Degradation in sewage treatment plant

Soluble in water, Persistence is unlikely, based on information available.

No inhibition of bacteria is expected if properly introduced into a biological treatment facility.

Bioaccumulation is unlikely 12.3. Bioaccumulative potential

	, , , , , , , , , , , , , , , , , , ,	
Component	log Pow	Bioconcentration factor (BCF)
Triethylamine	1.45	<4.9 OECD 305C

12.4. Mobility in soil The product is water soluble, and may spread in water systems . Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Other adverse effects

**Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

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### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues / Unused

**Contaminated Packaging** 

Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalogue, Waste Codes are not product specific, but

application specific.

Other Information

Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Solutions with high pH-value must be

neutralized before discharge.

### **SECTION 14: TRANSPORT INFORMATION**

### **IMDG/IMO**

14.1. UN numberUN129614.2. UN proper shipping nameTriethylamine14.3. Transport hazard class(es)3

14.3. Iransport hazard class(es)
Subsidiary Hazard Class
8
14.4. Packing group

### <u>ADR</u>

14.1. UN number UN1296
14.2. UN proper shipping name Triethylamine

14.3. Transport hazard class(es)3Subsidiary Hazard Class814.4. Packing groupII

### **IATA**

**14.1. UN number 14.2. UN proper shipping name**UN1296
Triethylamine

14.3. Transport hazard class(es)3Subsidiary Hazard Class814.4. Packing groupII

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Not applicable, packaged goods

Annex II of MARPOL73/78 and the

IBC Code

### **SECTION 15: REGULATORY INFORMATION**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

International inventorio		, 110100									
Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Triethylamine	204-469-4	-		Х	Х	-	Х	Х	Х	Х	Х

### **National Regulations**

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Triethylamine	WGK 1	Class I: 20 mg/m³ (Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Triethylamine	Tableaux des maladies professionnelles (TMP) - RG 49,RG 49bis

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

### **SECTION 16: OTHER INFORMATION**

### Full Text of H-/EUH-Statements Referred to Under Section 3

H225 - Highly flammable liquid and vapor

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

**CAS** - Chemical Abstracts Service

Legend

TSCA - United States Toxic Substances Control Act Section 8(b)

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

NZIoC - New Zealand Inventory of Chemicals

PNEC - Predicted No Effect Concentration

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

EC50 - Effective Concentration 50%

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

nventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate

VOC - Volatile Organic Compounds

### Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Creation Date Oct-2013 Next Revision Date Oct-2023

**Revision Summary** SDS section 1 updated and update of Format.

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

**FSUT3200** 

Triethylamine Revision Date Oct-2018

#### 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**