

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issue Date 02-May-2019 Revision Date 02-May-2019 Version 3

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

1.1. Product identifier

Product Code

3463

Product Name

Tanalith E 3463

Registration Number(s) Registreringsnummer i Sverige: 5497

Contains 2-aminoethanol

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

**Recommended Use** 528/2012 : Product-type 8: Wood preservatives

Uses advised against Consumer use

Reason why uses advised

Restricted to professional users

against

1.3. Details of the supplier of the safety data sheet

**Authorization Holder:** 

Lonza Cologne GmbH, Nattermannallee 1, Cologne, 50829, Germany. Tel: + 49 221 99 1990

Manufacturer

Arch Timber Protection, Wheldon Road, Castleford, United Kingdom, WF10 2JT, Tel: +44 (0) 1977 714000

A Lonza Company

For further information, please contact

E-mail address timberprotectionadvice.ukca@lonza.com

1.4. Emergency telephone number

Emergency Telephone NCEC: +44 (0)1235 239 670

Emergency Telephone - §45 - (EC)1272/2008			
Europe	112		
Sweden	Call 112 to actual poisoning and ask for Poison Information. Call 08-331231 for less urgent		
	cases.		

# **Section 2: HAZARDS IDENTIFICATION**

# 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Regulation (EC) NO 1272/2000	
Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

Revision Date 02-May-2019

#### 2.2. Label elements

Contains 2-aminoethanol



# DÄNGER

#### **Hazard statements**

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H410 - Very toxic to aquatic life with long lasting effects

Contains Propiconazole May produce an allergic reaction

EUH208 - Contains ( Propikonazol ). May produce an allergic reaction

EUH210 - Safety data sheet available on request

# Precautionary Statements - EU (§28, 1272/2008)

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

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P273 - Avoid release to the environment

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

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

#### 2.3. Other hazards

No information available

# Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Chemical Name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
2-aminoethanol	205-483-3	141-43-5	15-40	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1B (H314) STOT SE 3 (H335)	No data available
Copper, granulated	231-159-6	7440-50-8	10-30	Eye Irrit 2 (H319) Aquatic Chronic 2 (H411)	No data available
Ethoxylated amine	Not Listed	-	1-5	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic acute 1 (H400) Aquatic chronic 1 (H410)	No data available
Organic acid	Listed	-	1-5	Eye Irrit. 2 (H319)	No data available
Tebuconazole	403-640-2	107534-96-3	0.1-1	Acute Tox. 4 (H302)	No data available

				Repr. 2 (H361d) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	
Propiconazole	262-104-4	60207-90-1	0.1-1	Acute Tox. 4 (H302) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available

Full text of H- and EUH-phrases: see section 16

# **Section 4: FIRST AID MEASURES**

# 4.1. Description of first aid measures

**General advice** Immediate medical attention is required.

**Inhalation** Call a doctor or poison control centre immediately. Remove to fresh air. If not breathing,

give artificial respiration. If breathing is difficult, give oxygen.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

**Eye contact**Do not rub affected area. Immediate medical attention is required. Rinse immediately with

plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while

rinsing.

**Ingestion** Never give anything by mouth to an unconscious person. Immediate medical attention is

required. Remove from exposure, lie down. Clean mouth with water and drink afterwards

plenty of water. Do NOT induce vomiting. Call a doctor or poison control centre

immediately.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing.

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

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

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

Note to doctors Treat symptomatically.

# **Section 5: FIRE FIGHTING MEASURES**

#### 5.1. Extinguishing media

# Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO2). Water spray or fog.

# Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire

# 5.2. Special hazards arising from the substance or mixture

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

# Section 6: ACCIDENTAL RELEASE MEASURES

# 6.1. Personal precautions, protective equipment and emergency procedures

# **Personal precautions**

Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required. Ventilate affected area.

#### For emergency responders

Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

# 6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Prevent product from entering drains. Dam up. Take up mechanically, placing in

appropriate containers for disposal. After cleaning, flush away traces with water.

#### 6.4. Reference to other sections

See Sections 8, 11, 12, 13 for more information.

# **Section 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only with adequate ventilation and in closed systems. Avoid contact with skin, eyes or clothing.

# **General Hygiene Considerations**

Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Take off all contaminated clothing and wash it before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

# 7.2. Conditions for safe storage, including any incompatibilities

# **Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep/store only in original container. Keep at temperatures between > 5 and < 25 °C.

#### Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidising agents.

# 7.3. Specific end use(s)

# Specific use(s)

Timber preservative for dilution in water and application in industrial vacuum pressure plant

# **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain	Germany
2-aminoethanol	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm	TWA: 2 ppm
141-43-5	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 5.1 mg/m <sup>3</sup>
	* * * * * * * * * * * * * * * * * * *	STEL: 3 ppm	STEL: 3 ppm	STEL: 3 ppm	H*
		STEL: 7.6 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>	STEL: 7.5 mg/m <sup>3</sup>	
		Sk*	*	vía dérmica*	
Copper, granulated	_	TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	STM: 0.2 ml/m <sup>3</sup> e
7440-50-8	_	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	MAK: 0.1 mg/m <sup>3</sup> e
7440-50-6				TVVA. THIg/III	I WAK. U. I IIIg/IIIº e
		STEL: 0.6 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>		
		STEL: 2 mg/m <sup>3</sup>			
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
2-aminoethanol	TWA: 1 ppm	TWA: 1 ppm	TWA: 2.5 mg/m <sup>3</sup>	TWA: 1 ppm	TWA: 1 ppm
141-43-5	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>
	STEL: 3 ppm	STEL: 3 ppm	H*	STEL: 3 ppm	H*
	STEL: 7.6 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>		STEL: 7.6 mg/m <sup>3</sup>	
	pelle*	P*		iho*	
Copper, granulated	-	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1.0 mg/m <sup>3</sup>
7440-50-8		TWA: 1 mg/m <sup>3</sup>		TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
2-aminoethanol	TWA: 1 ppm	TWA: 2 ppm	STEL: 7.5 mg/m <sup>3</sup>	TWA: 1 ppm	TWA: 1 ppm
	TWA. 1 ppill	TWA. 2 ppill			
141-43-5	TWA: 2.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>
	STEL 3 ppm	STEL: 4 ppm		STEL: 2 ppm	STEL: 3 ppm
	STEL 7.6 mg/m <sup>3</sup>	STEL: 10 mg/m <sup>3</sup>		STEL: 5 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>
	H*			H*	Sk*
Copper, granulated	TWA: 1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>
7440-50-8	TWA: 0.1 mg/m <sup>3</sup>	STEL: 0.2 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
	STEL 4 mg/m <sup>3</sup>			STEL: 0.3 mg/m <sup>3</sup>	STEL: 0.6 mg/m <sup>3</sup>
	STEL 0.4 mg/m <sup>3</sup>	1		STEL: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>
Chemical Name	Belgium	Bulgaria	Croatia	Czech Republic	Estonia
2-aminoethanol		STEL: 3 ppm	TWA: 1 ppm	TWA: 2.5 mg/m <sup>3</sup>	TWA: 1 ppm
141-43-5		STEL: 7.6 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>	Ceiling: 7.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup>
141 40 0		TWA: 1 ppm	STEL: 3 ppm	D*	STEL: 3 ppm
		TWA: 1 ppin TWA: 2.5 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>		STEL: 7.6 mg/m <sup>3</sup>
		K*	K*		A*
O		TWA: 0.1 mg/m³ TWA:		TIMA 4/2	
( ODDAT Granulated		11 (// A· () 1 ma/m <sup>3</sup> 1 (// A· I	TWA: 0.2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
Copper, granulated			T14/4 / / 0		
7440-50-8		1.0 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>
			TWA: 1 mg/m³ STEL: 2 mg/m³	Ceiling: 2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>
				Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m³
7440-50-8  Chemical Name	Greece			Ceiling: 2 mg/m <sup>3</sup>	TWA: 0.2 mg/m³  Romania
7440-50-8	Greece	1.0 mg/m³  Hungary	STEL: 2 mg/m³  Latvia	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania
7440-50-8  Chemical Name	Greece	1.0 mg/m³  Hungary  TWA: 2.5 mg/m³	STEL: 2 mg/m³  Latvia  TWA: 0.2 ppm	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm
7440-50-8  Chemical Name 2-aminoethanol	Greece	1.0 mg/m³  Hungary	STEL: 2 mg/m³  Latvia  TWA: 0.2 ppm  TWA: 0.5 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³
7440-50-8  Chemical Name 2-aminoethanol	Greece	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm
7440-50-8  Chemical Name 2-aminoethanol	Greece	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³	STEL: 2 mg/m³  Latvia  TWA: 0.2 ppm  TWA: 0.5 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³
Chemical Name 2-aminoethanol 141-43-5	Greece	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*
7440-50-8  Chemical Name 2-aminoethanol 141-43-5  Copper, granulated	Greece	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5	Greece	1.0 mg/m³  Hungary  TWA: 2.5 mg/m³  STEL: 7.6 mg/m³  b*  TWA: 1 mg/m³  TWA: 0.1 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania  TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*  TWA: 0.5 mg/m³ STEL: 0.2 mg/m³
7440-50-8  Chemical Name 2-aminoethanol 141-43-5  Copper, granulated	Greece	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³	Ceiling: 2 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8		Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name	Slovakia	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ SIEL: 0.4 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania	Romania  TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*  TWA: 0.5 mg/m³ STEL: 0.2 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol	Slovakia TWA: 1 ppm	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ SIOVENIA TWA: 1 ppm	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia MAC: 0.5 mg/m³	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name	Slovakia	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ STEL: 0.5 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania	Romania  TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*  TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol	Slovakia TWA: 1 ppm	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ SIOVENIA TWA: 1 ppm	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia MAC: 0.5 mg/m³	Romania  TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*  TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol	Slovakia TWA: 1 ppm TWA: 2.5 mg/m³	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ STEL: 0.4 mg/m³ STEL: 5.5 mg/m³ STEL: 5.5 mg/m³ STEL: 5.5 mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia MAC: 0.5 mg/m³	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol	Slovakia TWA: 1 ppm TWA: 2.5 mg/m³	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ STEL: 0.5 mg/m³ SIovenia TWA: 1 ppm TWA: 2.5 mg/m³ STEL: STEL ppm STEL: STEL mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia MAC: 0.5 mg/m³	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol 141-43-5	Slovakia TWA: 1 ppm TWA: 2.5 mg/m³ K*	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ SIOVENIA  TWA: 1 ppm TWA: 2.5 mg/m³ STEL: STEL ppm STEL: STEL ppm STEL: STEL mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia  MAC: 0.5 mg/m³ Skin	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³
Chemical Name 2-aminoethanol 141-43-5  Copper, granulated 7440-50-8  Chemical Name 2-aminoethanol	Slovakia TWA: 1 ppm TWA: 2.5 mg/m³	Hungary TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*  TWA: 1 mg/m³ TWA: 0.1 mg/m³ STEL: 4 mg/m³ STEL: 4 mg/m³ STEL: 0.4 mg/m³ STEL: 0.5 mg/m³ SIovenia TWA: 1 ppm TWA: 2.5 mg/m³ STEL: STEL ppm STEL: STEL mg/m³	Latvia TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ * TWA: 0.5 mg/m³ STEL: 1 mg/m³	Ceiling: 2 mg/m³ Ceiling: 0.2 mg/m³ Lithuania  Russia MAC: 0.5 mg/m³	Romania TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P* TWA: 0.5 mg/m³ STEL: 0.2 mg/m³ STEL: 1.5 mg/m³

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration** No information available. **(PNEC)** 

8.2. Exposure controls

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Skin and body protection

Eye/face protection **Hand Protection** 

Wear safety glasses with side shields (or goggles).

Wear protective gloves. Ensure that the breakthrough time of the glove material is not

exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

In case of inadequate ventilation wear respiratory protection. Respiratory protection

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water. Prevent product from

entering drains. Local authorities should be advised if significant spillages cannot be

Remarks • Method

contained.

# Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

**Physical state** 

**Appearance** Liquid

Odour Slight Colour blue

**Property** Values рН 10.9

Melting point / freezing point Not determined Boiling point / boiling range Not determined Flash point Not applicable -**Evaporation rate** Not determined Flammability (solid, gas) Not determined

Flammability Limit in Air

Upper flammability limit: Not determined Lower flammability limit Not determined Vapour pressure Not determined Vapour density Not Determined

Relative density 1.19

Water solubility Soluble in water Solubility(ies) Not determined Not determined **Partition coefficient** Not determined **Autoignition temperature Decomposition temperature** Not determined Not determined Kinematic viscosity

Dynamic viscosity

**Explosive properties** Not an explosive **Oxidising properties** Not applicable

9.2. Other information

# Section 10: STABILITY AND REACTIVITY

# 10.1. Reactivity

No data available.

# 10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact No information available. Sensitivity to Static Discharge No information available.

# 10.3. Possibility of hazardous reactions

# **Possibility of Hazardous Reactions**

None under normal processing.

#### 10.4. Conditions to avoid

Keep from freezing.

# 10.5. Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidising agents.

#### 10.6. Hazardous decomposition products

None under normal use conditions.

# **Section 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

# **Acute toxicity**

# **Product Information**

InhalationMay be harmful if inhaled.Eye contactRisk of serious damage to eyes.

**Skin contact** No known effect based on information supplied.

**Ingestion** Harmful if swallowed.

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

 ATEmix (oral)
 3 180.60

 ATEmix (dermal)
 2 790.90

 ATEmix (inhalation-dust/mist)
 31.20

**Actual Product Data** 

**Dermal LD50** > 4000 mg/kg (rat)

**Component Information** 

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-aminoethanol	1515 mg/kg (RT)	2504 mg/kg (RBT)	-
Copper, granulated	>2500 mg/kg (RT)	>2000 mg/kg (RT)	> 5.11 mg/L (RT) 4hr
Ethoxylated amine	>500 mg/kg (RT)	-	-
Organic acid	3500 mg/kg (RT)	>20000 mg/kg (RBT)	-
Tebuconazole	>1700 mg/kg (RT)	> 2000 mg/kg (RT)	> 5.0 mg/L (RT) 4h
Propiconazole	= 1517 ma/ka (RT)	> 4000 ma/ka (RT)	>5.8 mg/L (RT) 4h

Note: RT = Rat RBT = Rabbit MSE = Mouse GP = Guinea Pig V = Vapour

Skin corrosion/irritation Not classified.

**Serious eye damage/eye irritation** Risk of serious damage to eyes.

**Sensitisation** Not a skin sensitiser.

**Germ cell mutagenicity** No information available.

Carcinogenicity None known.

Reproductive toxicity No information available.

STOT - single exposure May cause disorder and damage to the. Respiratory system.

No information available. STOT - repeated exposure

No information available. **Aspiration hazard** 

# **Section 12: ECOLOGICAL INFORMATION**

# 12.1. Toxicity

Note:

LC50: Lethal Concentration to 50% of a test population (Median Lethal Concentration)

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

Chemical Name	Algae/aquatic plants	Fish	Crustacea	
2-aminoethanol	2.8 mg/L EC50 72 h	349 mg/L LC50 96hr (Cyprinus	65 mg/L EC50 48 h (Daphnia	
	(Pseudokirchneriella subcapitata)	carpio)	magna)	
Copper, granulated	0.0426 - 0.0535 mg/L EC50 72hr	0.15 mg/L LC50 96hr	0.04 - 0.05 mg/L EC50 48hr	
	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss)	(Daphnia magna)	
Ethoxylated amine	>1 - 10 mg/L EC50 725h	0.1 - 1.0 mg/L LC50 96h (Danio	>1 - 10 mg/L EC50 48h (Daphnia	
	(Desmodesmus subspicatus)	rerio)	magna)	
Organic acid	>100 mg/L EC50 72h	>100 mg/L LC50 96h (Danio rerio)	240 mg/L EC50 48h (Daphnia	
	(Pseudokirchnerella subcapitata)		magna)	
Tebuconazole	3.8 mg/L EC50 72h	4.4 mg/L LC50 48h (Oncorhyncus	2.79 mg/L EC50 48h (Daphnia	
	(Pseudokirchneriella subcapitata)	mykiss)	magna)	
Propiconazole	0.76 mg/L EC50 (Desmodesmus	4.3 mg/L LC50 96h (Oncorhyncus	10.2 mg/L EC50 48h (Daphnia	
	subspicatus)	mykiss)	magna)	

# 12.2. Persistence and degradability

No information available.

# 12.3. Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient
2-aminoethanol	-1.91

# 12.4. Mobility in soil

# Mobility in soil

No information available.

# 12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bio-accumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bio-accumulating (vPvB).

# 12.6. Other adverse effects

No information available

**Endocrine Disruptor Information** 

# **Section 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

**Contaminated packaging** Do not re-use container.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

# **Section 14: TRANSPORT INFORMATION**

**IMDG** 

**14.1 UN/ID no** UN3082

**14.2 Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.

**14.3 Hazard Class** 9 **14.4 Packing Group** III

**Description** UN3082, Environmentally hazardous substances, liquid, n.o.s.(Copper, granulated), 9, III

**14.5 Marine pollutant**This material meets the definition of a marine pollutant

Environmental hazard Yes 14.6 Special Provisions 274, 335 EmS-No F-A, S-F

14.7 Transport in bulk according to No information available

Annex II of MARPOL 73/78 and the

**IBC Code** 

RID

**14.1 UN/ID no** UN3082

**14.2 Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.

 14.3 Hazard Class
 9

 Labels
 9

 14.4 Packing Group
 III

**Description** UN3082, Environmentally hazardous substances, liquid, n.o.s.(Copper, granulated), 9, III

14.5 Environmental hazard Yes

**14.6 Special Provisions** 274, 335, 601, 375

Classification code M6

**ADR** 

**14.1 UN/ID no** UN3082

**14.2 Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.

 14.3 Hazard Class
 9

 Labels
 9

 14.4 Packing Group
 III

**Description** UN3082, Environmentally hazardous substances, liquid, n.o.s.(Copper, granulated), 9, III

14.5 Environmental hazard Yes

**14.6 Special Provisions** 274, 335, 601, 375

Classification code M6
Tunnel restriction code (-)

IATA

**14.1 UN/ID no** UN3082

**14.2 Proper shipping name** Environmentally hazardous substances, liquid, n.o.s.

14.3 Hazard Class 9
14.4 Packing Group III

**Description** UN3082, Environmentally hazardous substances, liquid, n.o.s.(Copper, granulated), 9, III

14.5 Environmental hazard Yes

**14.6 Special Provisions** A97, A158, A197

ERG Code 9L

# **Section 15: REGULATORY INFORMATION**

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

National regulations Country specific regulation

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number	Title
2-aminoethanol	RG 49,RG 49bis	-
141-43-5		

Water hazard class (WGK) Water endangering class = 2 (self classification)

#### **European Union**

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

#### Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

# **Persistent Organic Pollutants**

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

# 15.2. Chemical safety assessment

No information available

# Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

# Full text of H-Statements referred to under section 3

H280 - Contains gas under pressure; may explode if heated

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H361d - Suspected of damaging the unborn child

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling None known \* Skin designation

**Issue Date** 02-May-2019

Revision Date 02-May-2019

**Revision Note** SDS sections updated, 2.2.

**Further information**The information contained in this safety data sheet is deemed sufficient to allow the user to

take all necessary operational control and risk mitigation measures to allow safe use of the

product.

In the event of any further questions regarding use conditions for this product please

contact the address in section 1.

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

#### Disclaime

The information provided in this Material 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**