

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

### **1.1. Product identifier**

Product code : Tintolav X9 - Degreaser  
Trades code : A39-050  
Product line: Tintolav

UFI: S2M0-A03R-R00G-H6Y7

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

Super degreaser detergent for stains and cosmetics

Sectors of use:

Industrial Manufacturing[SU3], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

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

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: [info@tintolav.com](mailto:info@tintolav.com) - Sito internet: [www.tintolav.com](http://www.tintolav.com)

Email tecnico competente: [a.conedera@tintolav.com](mailto:a.conedera@tintolav.com)

National contact: Malta: Emergency Ambulance 112  
Accident & Emergency Department 2545 4030

### **1.4. Emergency telephone number**

The UK National Poisons Emergency number +44 (0)870 600 6266  
London: Emergency 24 hour telephone +44 (0) 207188 0100

## **SECTION 2. Hazards identification**

### **2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS02, GHS05

Hazard Class and Category Code(s):

Flam. Liq. 3, Eye Dam. 1

Hazard statement Code(s):

H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

The product is a liquid that ignites at temperatures above 21 °C if exposed to an ignition source.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

### **2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):  
GHS02, GHS05 - Danger



Hazard statement Code(s):  
H226 - Flammable liquid and vapour.  
H318 - Causes serious eye damage.

Supplemental Hazard statement Code(s):  
EUH208 - Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Precautionary statements:

Prevention

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.

Response

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/doctor/physician

P370+P378 - In case of fire: use CO2 or powder to extinguish.

Storage

P403+P235 - Store in a well-ventilated place. Keep cool.

Disposal

P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:

tetrasodium ethylenediaminetetraacetate, Coconut diethanolamide, diethanolamine, Orange dye, Steareth-21, dipentene, Subtilisin, 2-aminoethanol, monoester with boric acid  
0,00% of the mixture consists of components whose toxicity is unknown.

Contains (Reg.EC 648/2004):

5% < 15% aliphatic hydrocarbons, non-ionic surfactants, anionic surfactants, < 5% Dye, enzymes, perfumes, Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1), Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1), D-Limonene ((S)-p-menta-1,8-diene)

For professional use only

UFI: S2M0-A03R-R00G-H6Y7

### 2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrilevant

### 3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations

and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
2-(2-butoxyethoxy)ethanol	>= 5 < 15%	Eye Irrit. 2, H319	603-096-00-8	112-34-5	203-961-6	NR
n-butyl acetate - FEMA 2174	>= 5 < 15%	EUH066; Flam. Liq. 3, H226; STOT SE 3, H336	607-025-00-1	123-86-4	204-658-1	NR
Sodium dodecylbenzenesulfonate	>= 5 < 15%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319	ND	25155-30-0	246-680-4	NR
Fatty alcohol ethoxylate	>= 1 < 5%	Acute Tox. 4, H302; Eye Dam. 1, H318 Limits: Eye Irrit. 2, H319 %C <=10; Eye Dam. 1, H318 %C >10;	ND	64425-86-1	ND	02-2119548 515-35-000 0
Coconut diethanolamide	>= 1 < 3%	Skin Irrit. 2, H315; Eye Dam. 1, H318	ND	68603-42-9	271-657-0	NR
Subtilisin substance for which there are Community workplace exposure limits	< 0,1%	Skin Irrit. 2, H315; Eye Dam. 1, H318; Resp. Sens. 1, H334; STOT SE 3, H335	647-012-00-8	9014-01-1	232-752-2	01-2119480 434-38
2-aminoethanol, monoester with boric acid	< 0,1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	ND	10377-81-8	233-829-3	NR
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) Note: B	< 0,1%	EUH071; Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Corr. 1B, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Limits: Skin Corr. 1C, H314 %C >=0,6; Skin Irrit. 2, H315 0,06<= %C <0,6; Eye Dam. 1, H318 %C >=0,6; Eye Irrit. 2, H319 0,06<= %C <0,6; Skin Sens. 1A, H317 %C >=0,0015; 100 100	613-167-00-5	55965-84-9	611-341-5	NR

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:  
Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:  
Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately  
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:  
Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

Immediately call a POISON CENTER/doctor/physician

## **SECTION 5. Firefighting measures**

### **5.1. Extinguishing media**

Advised extinguishing agents:  
In case of fire use: CO2 or powder extinguisher. Do not use water, it could spread and widen the fire.

Extinguishing means to avoid:  
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

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

No data available.

### **5.3. Advice for firefighters**

Use protection for the breathing apparatus  
Safety helmet and full protective suit.  
The spray water can be used to protect the people involved in the extinction  
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)  
Keep containers cool with water spray

## **SECTION 6. Accidental release measures**

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

6.1.1 For non-emergency personnel:  
Leave the area surrounding the spill or release. Do not smoke  
Wear gloves and protective clothing

6.1.2 For emergency responders:  
Wear gloves and protective clothing  
Eliminate all unguarded flames and possible sources of ignition. No smoking.  
Provision of sufficient ventilation.  
Evacuate the danger area and, in case, consult an expert.

## **6.2. Environmental precautions**

Contain spill with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities. Discharge the remains in compliance with the regulations

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

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.

Prevent it from entering the sewer system.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

## **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

# **SECTION 7. Handling and storage**

## **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors

Wear protective gloves/protective clothing/eye protection/face protection.

Do not smoke at work

At work do not eat or drink.

See also paragraph 8 below.

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

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool place, away from sources of heat and direct exposure of sunlight.

Always store in well ventilated areas.

Never close the container tightly, leave a chance to vent

Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

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

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

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

## **8.1. Control parameters**

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

CVE: TWA 10 ppm 67.5 mg/m<sup>3</sup> STEL 15 ppm 101.2 mg/m<sup>3</sup>

MAK DFG 10 ppm 67 mg/m<sup>3</sup>

n-butyl acetate:

TLV: 150 ppm come TWA 200 ppm come STEL (ACGIH 2003).

MAK: 100 ppm 480 mg/m<sup>3</sup> Categoria limitazione di picco: I(2) Gruppo di rischio per la gravidanza: C (DFG 2003).

NIOSH: 150 ppm TWA; 710 mg/m<sup>3</sup> TWA 1700 ppm IDLH

OSHA - Final PELs: 150 ppm TWA; 710 mg/m<sup>3</sup> TWA

Subtilisin:

ACGIH TLV: Ceiling: 0.00006 mg/m<sup>3</sup> Ceiling (as crystalline active enzyme, listed under Subtilisins)

Belgium: 0.00006 mg/m<sup>3</sup> Maximum Limit Value (8 hours)

Denmark: Ceiling: 0.00006 mg/m<sup>3</sup>

Ireland: TWA: 0.00006 mg/m<sup>3</sup> STEL: 0.00006 mg/m<sup>3</sup>

Netherlands: Ceiling: 0.00006 mg/m<sup>3</sup>

Norway: 0.00006 mg/m<sup>3</sup> Ceiling

Portugal: Ceiling: 0.00006 mg/m<sup>3</sup>

Spain: VLA-EC: 0.00006 mg/m<sup>3</sup>

Sweden: 1 glycineunit/m<sup>3</sup> LLV 3 glycineunit/m<sup>3</sup> LLV

Switzerland: STEL: 0.00006 mg/m<sup>3</sup>

Germany: = 1 glycineunit/m<sup>3</sup> LLV = 3 glycineunit/m<sup>3</sup> LLV

United Kingdom: 0.00004 mg/m<sup>3</sup> TWA

- Substance: 2-(2-butoxyethoxy)ethanol

DNEL

Systemic effects Long term Workers inhalation = 67,5 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 20 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 34 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 10 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 1,25 (mg/kg bw/day)

Local effects Long term Workers inhalation = 67,5 (mg/m<sup>3</sup>)

Local effects Long term Consumers inhalation = 34 (mg/m<sup>3</sup>)

Local effects Short term Workers inhalation = 101,2 (mg/m<sup>3</sup>)

Local effects Short term Consumers inhalation = 50,6 (mg/m<sup>3</sup>)

PNEC

Sweet water = 1 (mg/l)

sediment Sweet water = 4 (mg/kg/sediment)

Sea water = 0,1 (mg/l)

sediment Sea water = 0,44 (mg/kg/sediment)

intermittent emissions = 3,9 (mg/l)

STP = 200 (mg/l)

ground = 0,32 (mg/kg ground)

- Substance: n-butyl acetate

DNEL

Systemic effects Long term Workers inhalation = 12 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 7 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 12 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 3,4 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 2 (mg/kg bw/day)

Systemic effects Short term Workers inhalation = 48 (mg/m<sup>3</sup>)

Systemic effects Short term Workers dermal = 11 (mg/kg bw/day)

Systemic effects Short term Consumers inhalation = 300 (mg/m<sup>3</sup>)

Systemic effects Short term Consumers dermal = 6 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 2 (mg/kg bw/day)

Local effects Long term Workers inhalation = 300 (mg/m<sup>3</sup>)

Local effects Long term Consumers inhalation = 35,7 (mg/m<sup>3</sup>)

Local effects Short term Workers inhalation = 600 (mg/m<sup>3</sup>)

Local effects Short term Consumers inhalation = 300 (mg/m<sup>3</sup>)

PNEC

Sweet water = 0,18 (mg/l)  
sediment Sweet water = 0,98 (mg/kg/sediment)  
Sea water = 0,01 (mg/l)  
sediment Sea water = 0,09 (mg/kg/sediment)  
intermittent emissions = 0,36 (mg/l)  
STP = 35,6 (mg/l)  
ground = 0,09 (mg/kg ground)

- Substance: Coconut diethanolamide

DNEL

Systemic effects Long term Workers inhalation = 73,4 (mg/m<sup>3</sup>)  
Systemic effects Long term Workers dermal = 4,16 (mg/kg bw/day)  
Systemic effects Long term Consumers inhalation = 21,73 (mg/m<sup>3</sup>)  
Systemic effects Long term Consumers dermal = 2,5 (mg/kg bw/day)  
Systemic effects Long term Consumers oral = 6,25 (mg/kg bw/day)  
Local effects Long term Workers dermal = 0,09 (mg/kg bw/day)  
Local effects Long term Consumers dermal = 0,0562 (mg/kg bw/day)

PNEC

Sweet water = 0,007 (mg/l)  
sediment Sweet water = 0,195 (mg/kg/sediment)  
Sea water = 0,001 (mg/l)  
sediment Sea water = 0,019 (mg/kg/sediment)  
intermittent emissions = 0,024 (mg/l)  
STP = 830 (mg/l)  
ground = 0,035 (mg/kg ground)

- Substance: Subtilisin

DNEL

Systemic effects Long term Consumers oral = 1,8 (mg/kg bw/day)  
Systemic effects Short term Consumers oral = 3,6 (mg/kg bw/day)  
Local effects Long term Workers inhalation = 0,06 (mg/m<sup>3</sup>)  
Local effects Long term Consumers inhalation = 0,000015 (mg/m<sup>3</sup>)

PNEC

Sweet water = 0,0017 (mg/l)  
Sea water = 0,00017 (mg/l)  
intermittent emissions = 0,0009 (mg/l)  
STP = 65 (mg/l)  
ground = 0,568 (mg/kg ground)

- Substance: 2-aminoethanol, monoester with boric acid

DNEL

Systemic effects Long term Workers inhalation = 5,9 (mg/m<sup>3</sup>)  
Systemic effects Long term Workers dermal = 3,3 (mg/kg bw/day)  
Systemic effects Long term Consumers inhalation = 1,4 (mg/m<sup>3</sup>)  
Systemic effects Long term Consumers dermal = 1,7 (mg/kg bw/day)  
Systemic effects Long term Consumers oral = 1,7 (mg/kg bw/day)

PNEC

Sweet water = 0,026 (mg/l)  
sediment Sweet water = 0,054 (mg/kg/sediment)  
Sea water = 0,003 (mg/l)  
sediment Sea water = 0,005 (mg/kg/sediment)  
intermittent emissions = 0,26 (mg/l)  
STP = 10 (mg/l)  
ground = 0,014 (mg/kg ground)

## 8.2. Exposure controls



Appropriate engineering controls:  
Industrial Manufacturing:  
No specific monitoring foreseen

Public domain (administration, education, entertainment, services, craftsmen):  
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands. Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact

Material: nitrile rubber

minimum thickness: 0.11 mm

permeation time: 480 min

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Related to contained substances:

n-butyl acetate:

Do not delete in sewers. Do not let this chemical contaminates the environment

Subtilisin:

The local authority must be informed if the losses cannot be limited

Waste water must be conveyed to the waste water treatment plant

## SECTION 9. Physical and chemical properties

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

Physical and chemical properties	Value	Determination method
Appearance	Liquid	
Colour	Orange	
Odour	characteristic	
Odour threshold	not determined	
pH	11-11.5	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	45 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	flammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0,96-1,02 g/cm <sup>3</sup>	
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

## 9.2. Other information

Content of VOC ready to use condition: 9,04 %

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

No reactivity hazards

### 10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

### 10.3. Possibility of hazardous reactions

There are no hazardous reactions

### 10.4. Conditions to avoid

Related to contained substances:  
2-(2-butoxyethoxy)ethanol:  
Avoid contact with air.

Avoid contact with combustible materials. The product could catch fire. heat, open flames, sparks or hot surfaces.

#### 10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides.  
It can ignite in contact with oxidants mineral acids, strong oxidants agents, strong reducing agents.

#### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

### SECTION 11. Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

ATE(mix) oral = 8.070,1 mg/kg  
ATE(mix) dermal = 37.846,5 mg/kg  
ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritation: Sodium dodecylbenzenesulfonate: Skin irritation-not irritating (2.5%), moderate irritation (5%), moderate-severe irritation (47-50%).  
Coconut diethanolamide: Irritating  
2-aminoethanol, monoester with boric acid: Irritation of the skin:  
Rabbit (New Zealand White): non-irritant, (1993). Eye irritation:  
Rabbit (New Zealand White): moderately irritating, 1998  
Bovine (in vitro study): not severely irritating or corrosive, 2010
- (c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.  
2-(2-butoxyethoxy)ethanol: Eyes-rabbit Result: Mild eye irritation-24h  
Sodium dodecylbenzenesulfonate: Eye irritation-mild irritation (1%); moderate irritation (5%), and severe irritation (47-50%)  
Coconut diethanolamide: Acute Irritazione\Corrosione eyes
- (d) respiratory or skin sensitisation: Coconut diethanolamide: Non-sensitizing  
Subtilisin: Respiratory system: substance-sensitizing (human experience)
- (e) germ cell mutagenicity: 2-(2-butoxyethoxy)ethanol: Mutagenicity-Bacterial,,: negative +/-activation

Chromosomal aberration,,: negative +/-activation

Mutagenicity-Mammalian,,: negative +/-activation

- Subtilisin: No indication of mutagenic effects (OECD TG 471, 473, 476)
- (f) carcinogenicity: Sodium dodecylbenzenesulfonate: IARC: no component of this product present at levels greater than or equal to 0.1% identified as known or anticipated carcinogen by IARC.  
Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans
- (g) reproductive toxicity: based on available data, the classification criteria are not met.
- (h) specific target organ toxicity (STOT) single exposure: Subtilisin: Target organ-specific toxic (single exposure) Irritant, respiratory tract (ACGIH 2001)
- (i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.
- (j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

INHALATION RISK: A harmful contamination of air was reached slowly for evaporation of this substance at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to eyes the effects of REPEATED EXPOSURE or long term:

the liquid degreasing the skin features.

ACUTE HAZARDS/symptoms dry SKIN.

EYE Redness. Pain.

LD50 (rat) Oral (mg/kg body weight) = 1720

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2700

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 374

n-butyl acetate:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause effects on the central nervous system much greater exposure to the OEL may result in attenuation of vigilance.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Sore throat. Vertigo. Headaches.

Dry scalp SKIN.

EYE Redness. Pain.

INGESTION Nausea.

LD50 oral, rat-10,700-14,130 mg/kg Lc50 Inhalation-rat-4:0-> 21.0 mg/l Dermal Ld50-rabbit-17,600 mg/kg

LD50 (rat) Oral (mg/kg body weight) = 10700

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 17600

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 21

Sodium dodecylbenzenesulfonate:

LD50 (rat) Oral (mg/kg body weight) = 438

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Fatty alcohol ethoxylate:

LD50 (rat) Oral (mg/kg body weight) = 3100

Coconut diethanolamide:

Ingestion: oral rat LD50: > 2,000 mg/kg

Eye contact: irritating to the eye (rabbit). Can cause irreversible damage to the eye.

Skin contact: moderately irritating for a single application (4 h-rabbit)

Readily biodegradable in accordance with the criteria of Directive 67/548 and subsequent modifications.

LD50 (rat) Oral (mg/kg body weight) = 5000

Subtilisin:

LD50 (rat) Oral (mg/kg body weight) = 1800

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,13

2-aminoethanol, monoester with boric acid:

Acute oral toxicity

Parameter: LD50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Orally

Species: Rat

Effective dose:> 2000 mg / kg

Acute dermal toxicity

Parameter: discriminating dose. (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Dermal

Species: Rat

Effective dose:> 2000 mg / kg

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

### 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

### 12.1. Toxicity

Related to the substances contained:

2- (2-butoxyethoxy) ethanol:

Toxicity to fish LC50 - *Lepomis macrochirus* - 1,300 mg / l - 96 h

CL0 - *Leuciscus idus* (Golden Leuciscus) -> 1.000 mg / l - 48 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - *Daphnia magna* (Water flea) - 2850 mg / l - 48 h

Toxicity to algae CI50 - *Desmodesmus subspicatus* (green algae) -> 100 mg / l - 24 h

Toxicity to bacteria LC50 - *Pseudomonas putida* - 1.170 mg / l - 16 h

C (E) L50 (mg / l) = 1300

butyl acetate:

The substance is harmful to aquatic organisms.

Toxicity to fish LC50 - *Lepomis macrochirus* - 100 mg / l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 72.8 - 205.0 mg / l - 24 h

C (E) L50 (mg / l) = 72.800003

Sodium dodecylbenzenesulphonate:

C (E) L50 (mg / l) = 1.67

Alcohols, C13-C15- branched and linear ethoxylated:

Ichthyotoxicity:

LC50 (96 h) 1 - 10 mg / l, *Brachydanio rerio*

Aquatic invertebrates:

EC50 (48 h) 1 - 10 mg / l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 1 - 10 mg / l, *Scenedesmus subspicatus*

Microorganisms / Effects on activated sludge:

EC10> 1.000 mg / l, Activated sludge (DEV-L2)

Chronic toxicity to aquatic invertebrates:

NOEC (21 d), 0.33 mg / l, *Daphnia magna*

C (E) L50 (mg / l) = 1

Coconut Diethanolamide:

Acute / prolonged toxicity to fish: (96h) 2.52 mg / l (*brachydanio rerio*)

Acute toxicity to aquatic Invertebrates: EC50 (24h) 2.8 mg / l (*daphnia Magna*)

Primary biodegradability:> 90% (OECD)

Easy biodegradability:> 60% (Respirometric test, O2 consumption)

Theoretical O2 demand (thod): 2.52 mg O2 / mg.

Chemical O2 Demand (COD): 2.51 mg O2 / mg.

C (E) L50 (mg / l) = 2.39

Subtilisin:

C (E) L50 (mg / l) = 0.586

2-aminoethanol, monoester with boric acid:

Acute (short-term) toxicity to fish

Parameter: LC50 (2-aminoethanol, monoester with boric acid; CAS No. : 10377-81-8)

Species: *Cyprinus carpio*

Effective dose: = 617 mg / l

Exposure time: 96 h

Acute (short-term) toxicity to daphnia

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No. : 10377-81-8)

Species: *Daphnia magna*

Effective dose: = 423 mg / l

Exposure time: 48 h

Acute (short-term) toxicity to algae

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No. : 10377-81-8)

Species: *Pseudokirchneriella subcapitata*

Effective dose: = 26 mg / l

Exposure time: 72 h

Bacterial toxicity

Parameter: IC50 (2-aminoethanol, monoester with boric acid; CAS No. : 10377-81-8)

Species: Activated sludge

Effective dose: > 100

C (E) L50 (mg / l) = 26

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7]; 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3: 1):

Acute toxicity to fish

The material is very toxic to aquatic organisms (LC50 / EC50 / IC50 below 1 mg / l for the most sensitive species). LC50, *Oncorhynchus mykiss* (rainbow trout), flow-through test, 96 Hour, 0.19 mg / l, OECD Test Guideline 203 or equivalent

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), Flow-through test, 48 h, 0.16 mg / l, OECD Test Guideline 202 or equivalent

Acute toxicity to algae / aquatic plants

EC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, 0.027 mg / l, OECD Test Guideline 201 or equivalent

NOEC, *Skeletonema costatum*, Static test, 72 h, Growth rate, 0.0014 mg / l

Chronic toxicity to fish

NOEC, Rainbow trout (*Oncorhynchus mykiss*), flow, 14 d, 0.05 mg / l

Chronic toxicity to aquatic invertebrates

NOEC, *Daphnia magna*, Flow-through test, 21 d, 0.1 mg / l

100

NOEC (mg / l) = 0.05 100

Use according to good working practices, avoiding to disperse the product in the environment.

## 12.2. Persistence and degradability

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The substance miscible in water and would leach into the groundwater, be lost in groundwater and be biologically degraded.

85% (28 d, Ready Biodegradability: Modified MITI Test (s)) readily biodegradable

Fatty alcohol ethoxylate:

Disposal considerations:

> = 90% the bismuth active substance (OECD guideline 303A)

60% > CO<sub>2</sub> formation of theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, c. 4-C)

Readily biodegradable (according to OECD criteria).

Subtilisin:

Rapidly biodegradable (OECD TG 301B)

2-aminoethanol, monoester with boric acid:

Parameter: Biodegradation

Effective dose: approx. 73%

Exposure time: 28 days

Parameter: Biodegradation

Effective dose: > 60%

Exposure time: 10 days

Easily biodegradable.

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradation (aquatic metabolism): 5-chloro-2-methyl-4-isotiazolin-3-one (CMIT):

anaerobic t = 0.2 days. t = 0.38 aerobic 1.3 days. 2-methyl-4-isotiazolin-3-

one (MIT): aerobic t = 0.38 1.4 days

### 12.3. Bioaccumulative potential

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The substance is not expected to bioaccumulate.

Sodium dodecylbenzenesulfonate:

Bioaccumulation-28 lepomis macrochirus d -64 g/l

Bioconcentration factor (BCF): 220

Subtilisin:

Do not bio-accumulate

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Low potential for bioconcentration (FBC or Log Pow < 100 < 3).

### 12.4. Mobility in soil

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The high idrosolubilit and low octanol/water partition coefficient indicates that adsorption to suspended solids and sediments are not significant

### 12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

### 12.6. Endocrine disrupting properties

No data available.

### 12.7. Other adverse effects

No adverse effects

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

## SECTION 14. Transport information

### 14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 2924

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 5 L per package 30 Kg

Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 Kg



### 14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INFIAMMABILE, CORROSIVO, N.A.S. (Sale sodico dell'acido etilendiamminetetracetico, Nitrato rameico, Colorante Arancio, dipentene, Allyl hexanoate, Decanal, acetato di butile)

ADR/RID/IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (tetrasodium ethylenediaminetetraacetate, Copper nitrate, Orange dye, dipentene, Allyl hexanoate, Decanal, n-butyl acetate)

ICAO-IATA: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (tetrasodium ethylenediaminetetraacetate, Copper nitrate, Orange dye, dipentene, Allyl hexanoate, Decanal, n-butyl acetate)

### 14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 3

ADR/RID/IMDG/ICAO-IATA: Label : Limited quantities

ADR: Tunnel restriction code : D/E

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L

IMDG - EmS : F-E, S-C

### 14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

### 14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent : Not

### 14.6. Special precautions for user

No data available.

### 14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

## SECTION 15. Regulatory information

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

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

Restrictions relating to the product or to substances contained in annex XVII to Regulation (EC) 1907/2006.

3 product section.

Substances.

Point. 55 BUTYL DIGLYCOL

Seveso category:

P5c - FLAMMABLE LIQUIDS

REGULATION (EU) No 1357/2014 - waste:

HP4 - Irritant — skin irritation and eye damage

### **15.2. Chemical safety assessment**

The supplier has made an assessment of chemical safety

## **SECTION 16. Other information**

### **16.1. Other information**

Points modified compared to previous release: 1.1. Product identifier, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 3.2 Mixtures, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 5.1. Extinguishing media, 6.3. Methods and material for containment and cleaning up, 7.1. Precautions for safe handling, 8.1. Control parameters, 8.2. Exposure controls, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.6. Endocrine disrupting properties, 14.2. UN proper shipping name

Description of the hazard statements exposed to point 3

H319 = Causes serious eye irritation.

H226 = Flammable liquid and vapour.

H336 = May cause drowsiness or dizziness.

H302 = Harmful if swallowed.

H312 = Harmful in contact with skin.

H315 = Causes skin irritation.

H318 = Causes serious eye damage.

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 = May cause respiratory irritation.

H301 = Toxic if swallowed.

H310 = Fatal in contact with skin.

H314 = Causes severe skin burns and eye damage.

H317 = May cause an allergic skin reaction.

H330 = Fatal if inhaled.

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

Classification based on data of all mixture components

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation 1272/2008/EC

Regulation 2010/453/EC

\*\* The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.  
It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.

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