

### Safety Data Sheet dated 8/11/2024, version 5

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

1.1. Product identifier

Mixture identification:

Trade name: LAVATUTE
Trade code: G08-003 / 004

UFI: 90N1-K0JT-5002-K7HJ

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

Recommended use:

Liquid detergent for textiles. For professional use.

Products categories: PC35 - washing and cleaning products. This category includes water and solvent based products.

Use at industrial sites (IS). Widespread use by professional workers (PW).

Uses advised against:

Do not use for purposes other than those indicated.

1.3. Details of the supplier of the safety data sheet

Company:

G.B.M. ELETTROCHIMICA s.r.l.

Via Fiumicino San Mauro, 120/130 - 47039 – Savignano Sul Rubicone (FC) Italy tel +39 0541 930058

e-mail: gbm@gbmprodottichimici.it web site: www.gbmprodottichimici.it

1.4. Emergency telephone number

+39 0541-930058

#### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Skin Irrit. 2, H315 Causes skin irritation.

Eye Dam. 1, H318 Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements:

P264 Wash hands thoroughly with water after handling.

P280 Wear protective gloves and eye/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 In case of malaise, contact a POISON CENTRE/doctor.



P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

Special Provisions:

None

Contains

Ethoxylated alcohol

Benzenesulphonic acid, sodium salts.

Undecanol, branched and linear, ethoxylated, propoxylated

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

### **SECTION 3: Composition/information on ingredients**

3.1. Substances

N.A.

3.2. Mixtures

Ingredients according to EC Detergents Regulation 648/2004:

5-15%: non-ionic surfactants.

< 5%: anionic surfactants, soap, tetrasodium ethylenediaminetetraacetate

Other comp.: perfume, terpinolene, limonene, mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numl	oer	Classification
>= 5% -	Ethoxylated alcohol	CAS:	69011-36-5	<b>③</b>
< 10%				3.3/1 Eye Dam. 1 H318
				3.1/4/Oral Acute Tox. 4 H302
>= 5% -	2-butoxyethanol;	Index	603-014-00-0	<u> </u>
< 10%	ethylene glycol	number:		3.1/3/Inhal Acute Tox. 3 H331
	monobutyl ether	CAS:	111-76-2	
		EC:	203-905-0	3.1/4/Oral Acute Tox. 4 H302
		REACH No.		
			2119475108-	3.2/2 Skin Irrit. 2 H315
			36-0005	(A)
				3.3/2 Eye Irrit. 2 H319
				Acute Toxicity Estimate:
				ATE - Oral 1200 mg/kg bw
				ATE - Inhalation (Vapours) 3 mg/l
>= 1% -	Fatty acids, coco,	CAS:	61789-30-8	
< 5%	potassium salt	EC:	263-049-9	3.3/2 Eye Irrit. 2 H319
				3.2/2 Skin Irrit. 2 H315
>= 1% -	Benzenesulphonic	CAS:	68411-30-3	<b>(1)</b>
< 5%	acid, sodium salts.	EC:	270-115-0	3.1/4/Oral Acute Tox. 4 H302



	T	l n n a c · · · ·		ΤΔ.
		REACH No.	2119489428- 22-XXXX	3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 5%	Alcohols, C12-15- branched and linear, ethoxylated (>2.5 moles EO) (CAS: 106232-83-1)	CAS: EC:	106232-83-1 932-186-2	3.3/2 Eye Irrit. 2 H319 4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 5%	Undecanol, branched and linear, ethoxylated, propoxylated	EC:	940-634-3	3.3/1 Eye Dam. 1 H318
25 ppm	sodium hydroxide; caustic soda	Index number: CAS: EC: REACH No.	011-002-00-6 1310-73-2 215-185-5 :01- 2119457892- 27-XXXX	2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319
9 ppm	Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one	Index number: CAS: EC:	613-167-00-5 55965-84-9 611-341-5	3.1/1/Dermal Acute Tox. 1 H310 3.1/3/Oral Acute Tox. 3 H301 3.2/1C Skin Corr. 1C H314 3.3/1 Eye Dam. 1 H318 3.4.2/1A Skin Sens. 1A H317 3.1/2/Inhal Acute Tox. 2 H330 4.1/A1 Aquatic Acute 1 H400 M=100. 4.1/C1 Aquatic Chronic 1 H410 M=100. EUH071 Specific Concentration Limits: C >= 0,6%: Eye Dam. 1 H318 C >= 0,6%: Skin Corr. 1C H314 0,06% <= C < 0.6%: Skin Irrit. 2



H315 0,06% <= C < 0.6%: Eye Irrit. 2
H319
C >= 0,0015%: Skin Sens. 1A
H317

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

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

### **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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

6.1. Personal precautions, protective equipment and emergency procedures



Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Store the product only in its original closed containers, in a cool, dry and well-ventilated areas at temperatures below 0 °C and not higher than 40 °C.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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

8.1. Control parameters

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

EC - TWA(8h): 98 mg/m3, 20 ppm - STEL: 246 mg/m3, 50 ppm - Notes: Skin

UE - TWA(8h): 98 mg/m3, 20 ppm - STEL: 246 mg/m3, 50 ppm

ACGIH - TWA(8h): 20 ppm

sodium hydroxide; caustic soda - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: N.A.

**DNEL Exposure Limit Values** 

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Worker Professional: 246 mg/m3 - Exposure: Human Inhalation - Frequency: Short

Term, local effects - Endpoint: Irritation (respiratory tract)

Consumer: 6.3 mg/kg b.w./day - Exposure: Human Oral - Frequency: Long Term,

systemic effects - Endpoint: Repeated dose toxicity

Consumer: 147 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local

effects - Endpoint: Irritation (respiratory tract)



Consumer: 59 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity

Worker Professional: 1091 mg/m3 - Exposure: Human Inhalation - Frequency: Short

Term, systemic effects - Endpoint: Acute toxicity

Consumer: 426 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects - Endpoint: Acute toxicity

Worker Professional: 98 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity

Consumer: 26.7 mg/kg b.w./day - Exposure: Human Oral - Frequency: Short Term, systemic effects - Endpoint: Acute toxicity

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

Worker Professional: 85 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 6 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 42.5 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 1.5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.425 mg/kg b.w./day - Exposure: Human Oral - Frequency: Long Term, systemic effects

sodium hydroxide; caustic soda - CAS: 1310-73-2

Consumer: 1 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract) - Notes: ECHA

Worker Professional: 1 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract) - Notes: ECHA

### PNEC Exposure Limit Values

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Target: Fresh Water - Value: 8.8 mg/l - Type of hazard: Danger to aquatic organisms Target: Marine water - Value: 0.88 mg/l - Type of hazard: Danger to aquatic organisms Target: Freshwater sediments - Value: 34.6 mg/kg dry weight - Type of hazard: Danger to aquatic organisms

Target: Marine water sediments - Value: 3.46 mg/kg dry weight - Type of hazard: Danger to aquatic organisms

Target: Intermittent release - Value: 26.4 mg/l - Type of hazard: Danger to aquatic organisms

Target: Sewage treatment plant - Value: 463 mg/l - Type of hazard: Danger to aquatic organisms

Target: Secondary poisoning - Value: 20 mg/kg - Type of hazard: Hazard for predators Target: Soil - Value: 2.33 mg/kg dry weight - Type of hazard: Danger to terrestrial organisms

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

Target: Fresh Water - Value: 0.268 mg/l
Target: Marine water - Value: 0.0268 mg/l
Target: Intermittent release - Value: 0.0167 mg/l
Target: Sewage treatment plant - Value: 3.43 mg/l

Target: Freshwater sediments - Value: 8.1 mg/kg dry weight Target: Marine water sediments - Value: 6.8 mg/kg dry weight

Target: Soil - Value: 35 mg/kg dry weight

8.2. Exposure controls

Eye protection:

Eye glasses.

Protection for skin:



Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

#### Protection for hands:

Use protective gloves resistant to chemicals. The choice of hand PPE must be made on the basis of its better resistance to chemical agents, taking into account the results of tests obtained in accordance with EN 374 Because of the great diversity of types, you should follow the instructions of the manufacturers. Suitable materials for short contact (recommended: at least protection index 2, corresponding to> 30 minutes permeation time according to EN 374). Butyl rubber - 0.7 mm thick. Suitable materials for direct and prolonged contact (recommended: protection index 6, corresponding> 460 minutes of permeation time according to EN 374) nitro-caoutchouc (NBR) - 0.4 mm thick.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

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

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	-	
Colour:	Colourless	-	
Odour:	CITRUS	-	
Melting point/freezing point:	Not Relevant	-	
Boiling point or initial boiling point and boiling range:	Not Relevant		
Flammability:	Non- flammable		
Lower and upper explosion limit:	Not Relevant		
Flash point:	Not Relevant		
Auto-ignition temperature:	Not Relevant		
Decomposition temperature:	Not Relevant		
pH:	9,5		
Kinematic viscosity:	Not Relevant		
Solubility in water:	N.A.		
Solubility in oil:	N.A.		
Partition coefficient n-	Not Relevant		
octanol/water (log value):			
Vapour pressure:	Not Relevant	1	
Density and/or relative	1.01 kg/L ±		
density:	0.05		
Relative vapour density:	Not Relevant	-	

Particle characteristics:

Particle size:	Not Relevant	 



9.2. Other information

Properties Value Method: Notes

### **SECTION 10: Stability and reactivity**

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with strong oxidizing and reducing agents, strong acids and bases

10.6. Hazardous decomposition products

Under normal conditions of storage and use, are not known hazardous decomposition products.

### **SECTION 11: Toxicological information**

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:

LAVATUTE

a) acute toxicity

Not classified

No data available for the product

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

No data available for the product

e) germ cell mutagenicity

Not classified

No data available for the product

f) carcinogenicity

Not classified

No data available for the product

g) reproductive toxicity

Not classified

No data available for the product

h) STOT-single exposure

Not classified

No data available for the product

i) STOT-repeated exposure

Not classified

No data available for the product

j) aspiration hazard

Not classified

No data available for the product



Toxicological information of the main substances found in the product:

Ethoxylated alcohol - CAS: 69011-36-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat range 300-2000 mg/kg bw

c) serious eye damage/irritation:

Route: Eyes - Species: Rabbit Positive

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

a) acute toxicity

ATE - Oral 1200 mg/kg bw

ATE - Inhalation (Vapours) 3 mg/l

Test: STA - Route: Oral - Species: Rat = 1200 mg/kg bw

Test: STA - Route: Inhalation Vapour - Species: Rat = 2.25 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg bw - Source: OECD TG 402

Test: NOAEL(C) - Route: Oral - Species: Rat (male) 2 69 mg/kg dry weight - Duration:

90d - Source: OECD TG 408 - Notes: Subacute toxicity

Test: NOAEL(C) - Route: Oral - Species: Rat (female) 2 82 mg/kg dry weight - Duration:

90d - Source: OECD TG 408 - Notes: Subacute toxicity

Test: NOAEL(C) - Route: Skin - Species: Rabbit > 150 mg/kg di b.w./day - Duration:

90d - Source: OECD TG 411 - Notes: Subacute toxicity

b) skin corrosion/irritation:

Test: Skin Irritant Positive - Causes skin irritation

c) serious eye damage/irritation:

Test: Eye Irritant Positive - Causes severe eye irritation

d) respiratory or skin sensitisation:

Species: Guinea pig Negative - Based on available data, the classification criteria are not met

e) germ cell mutagenicity:

Test: In vitro genotoxicity - Route: Inhalation - Species: Rat Negative 62.5 mg/kg

Fatty acids, coco, potassium salt - CAS: 61789-30-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

b) skin corrosion/irritation:

Positive - Source: N.A. - Causes skin irritation

c) serious eye damage/irritation:

Positive - Source: N.A. - Causes serious eye damage

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1080 mg/kg - Harmful if ingested

Route: Inhalation

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Based on available data, the classification criteria are not met

b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit Yes - Causes skin irritation

c) serious eye damage/irritation:

Test: Eye Corrosive - Species: Rabbit Yes - Causes serious eye damage

d) respiratory or skin sensitisation:

Test: Maximisation Test - Species: Guinea pig Negative - Based on available data, the classification criteria are not met

e) germ cell mutagenicity:

Test: In vitro genotoxicity Negative - Based on available data, the classification criteria are not met

Test: In vivo genotoxicity Negative - Based on available data, the classification criteria are not met



- f) carcinogenicity:
- g) reproductive toxicity:

Based on available data, the classification criteria are not met

Test: Teratogenicity - Based on available data, the classification criteria are not met h) STOT-single exposure:

Negative - Based on available data, the classification criteria are not met

i) STOT-repeated exposure:

Negative - Based on available data, the classification criteria are not met

Test: NOAEL - Route: Oral - Species: Rat = 125 mg/kg di b.w./day - Duration: 28d

Test: NOAEL - Species: Rat = 40 mg/kg di b.w./day - Duration: 6M

Test: NOAEL - Species: Rat = 85 mg/kg di b.w./day - Duration: 9M

Toxicological kinetics, metabolism and distribution information:

Alcohols, C12-15-branched and linear, ethoxylated (>2.5 moles EO) (CAS: 106232-83-1) - CAS: 106232-83-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative

Undecanol, branched and linear, ethoxylated, propoxylated

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg bw - Based on available data, the classification criteria are not met

c) serious eye damage/irritation:

Test: Skin Irritant - Species: Rabbit Positive - Source: N.A.

Test: Eye Corrosive - Species: Rabbit Positive - Source: N.A.

sodium hydroxide; caustic soda - CAS: 1310-73-2

b) skin corrosion/irritation:

Test: Skin Corrosive Yes - Causes severe skin burns

c) serious eye damage/irritation:

Test: Eye Corrosive Yes - Causes serious eye damage

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one - CAS: 55965-84-9

a) acute toxicity:

Test: LC50 - Route: Inhalation of dust and fog - Species: Rat = 0.31 mg/l - Duration: 4h - Source: SDS

b) skin corrosion/irritation:

Test: Skin Corrosive Yes - Source: SDS - Causes severe skin burns

c) serious eye damage/irritation:

Test: Eye Corrosive Yes - Source: SDS - Causes serious eye damage

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Guinea pig Yes - Source: OECD TG 406 - Notes: Maximisation Test; GLP: yes. - May cause sensitisation in contact with skin

Test: Skin Sensitization - Route: Skin - Species: Mouse Yes - Source: OECD TG 429 - Notes: Local lymphonode test (LLNA); GLP: yes. - The product is a skin sensitiser, subcategory 1A.

### 11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%



### **SECTION 12: Ecological information**

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12.1. Toxicity
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Adopt good working practices, so that the product is not released into the environment. LAVATUTE

Not classified for environmental hazards

Based on available data, the classification criteria are not met

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1474 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

Endpoint: EC50 - Species: Daphnia = 1550 mg/l - Duration h: 48 - Notes: Daphnia magna.

Endpoint: EC50 - Species: Algae = 911 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subcapitata; OECD TG 201

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish > 100 mg/l - Notes: Brachydanio rerio

Fatty acids, coco, potassium salt - CAS: 61789-30-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 1 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae > 1 mg/l - Duration h: 48

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1-10 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 1-10 mg/l - Duration h: 48

b) Aquatic chronic toxicity:

Endpoint: NOEC (196d) - Species: Fish > 0.1-1 mg/l Endpoint: NOEC (21d) - Species: Daphnia > 1-10 mg/l

d) Terrestrial toxicity:

Endpoint: EC10 (28D) = 71.7 mg/kg Endpoint: EC10 = 107.6 mg/kg

Endpoint: NOEC - Species: Terrestrial plants = 100 mg/kg Endpoint: EC10 - Species: Terrestrial plants = 86 mg/kg

Endpoint: NOEC - Species: Terrestrial plants = 52 mg/kg

e) Plant toxicity:

Endpoint: EC50 - Species: Algae > 10-100 mg/l - Duration h: 72

Endpoint: NOEC (28D) > 4 mg/l

Endpoint: EC50 > 1-10 mg/l - Duration h: 168

g) Toxicity to aquatic invertebrates:

Endpoint: NOEC (32d) - Species: Aquatic invertebrates > 1-10 mg/l

Alcohols, C12-15-branched and linear, ethoxylated (>2.5 moles EO) (CAS: 106232-83-1) - CAS: 106232-83-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 0.1-1 mg/l - Duration h: 96

c) Bacteria toxicity:

Endpoint: EC50 - Species: Activated sludge = 140 mg/l

e) Plant toxicity:

Endpoint: EC50 - Species: Algae > 0.1-1 mg/l - Duration h: 72

Endpoint: NOEC = 10 mg/kg

g) Toxicity to aquatic invertebrates:

Endpoint: EC50 - Species: Daphnia > 0.1-1 mg/l - Duration h: 48

Undecanol, branched and linear, ethoxylated, propoxylated

a) Aquatic acute toxicity:



Endpoint: LC50 - Species: Fish > 1-10 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 1-10 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae > 1-10 mg/l - Duration h: 72

e) Plant toxicity:

Endpoint: NOEC - Species: Algae = 1.7 mg/l - Duration h: 72

sodium hydroxide; caustic soda - CAS: 1310-73-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2 180 mg/l - Duration h: 48

Endpoint: EC50 - Species: Daphnia = 40.4 mg/l - Duration h: 48 - ECHA

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one - CAS: 55965-84-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 1.02 mg/l - Duration h: 48 - Notes: Daphnia magna.

Endpoint: EC50 - Species: Algae = 0.379 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata; OECD TG 201

Endpoint: LC50 - Species: Fish = 0.58 mg/l - Duration h: 96 - Notes: Danio rerio.

Endpoint: M Factor (acute) = 100

b) Aquatic chronic toxicity:

Endpoint: EC10 - Species: Algae = 0.188 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subcapitata; OECD TG 201

Endpoint: M Factor (Chronic) = 100

12.2. Persistence and degradability

None

LAVATUTE

Biodegradability: The product contains only readily biodegradable surfactants meet the criteria laid down in Regulation detergents EU (EC/648/2004).

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Biodegradability: Readily biodegradable - Duration: 28d - %: 90.4 - Notes: OECD TG 301 B

Fatty acids, coco, potassium salt - CAS: 61789-30-8

Biodegradability: Biodegradable

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

Biodegradability: Persistence - Duration: 28d - %: 60

Undecanol, branched and linear, ethoxylated, propoxylated

Biodegradability: Readily biodegradable - Duration: 28d

Biodegradability: Biodegradable - Duration: 60d

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one - CAS: 55965-84-9

Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Bioaccumulation: Low potential for bioaccumulation

Fatty acids, coco, potassium salt - CAS: 61789-30-8

Bioaccumulation: Not bioaccumulative

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

Bioaccumulation: Does not accumulate significantly in organisms - Test: BCF -

Bioconcentrantion factor 2-1000 - Duration: 192h

12.4. Mobility in soil

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Mobility in soil: The product has very high mobility potential

Benzenesulphonic acid, sodium salts. - CAS: 68411-30-3

Mobility in soil: 9



12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

#### **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

#### **SECTION 14: Transport information**

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

NΙΔ

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

ΝΔ

14.5. Environmental hazards

ADN-Environmentally hazardous in tank-vessels:

N.A

14.6. Special precautions for user

Ν.Α.

14.7. Maritime transport in bulk according to IMO instruments

NΑ

#### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)



Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3 Restriction 40

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

#### **SECTION 16: Other information**

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H331 Toxic if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H310 Fatal in contact with skin.

H301 Toxic if swallowed.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals,
		Category 1
Acute Tox. 1	3.1/1/Dermal	Acute toxicity (dermal), Category 1
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Skin Irrit. 2	3.2/2	Skin irritation, Category 2



Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods



by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.