Safety Data Sheet
RATIO RB-4 ECOLABEL

Safety Data Sheet dated 7/5/2025, version 1

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

1.1. Product identifier

Mixture identification

Trade name: RATIO RB-4 ECOLABEL

UFI: EW84-F012-E009-N8XD

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

Recommended use:

Detergent for hard surfaces.

Professional use (SU22) - Washing and cleaning products (PC35)

Uses advised against:

Different uses than recommended. Do not use in combination with other products.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

SUTTER INDUSTRIES s.p.a. - Società con Unico Socio

15060 Borghetto Borbera (AL) Italia

Tel. +39 0143 631.1

Competent person responsible for the safety data sheet:

regulatory.affairs@sutter.it

1.4. Emergency telephone number

+39 0143 631.1 mon-fri 9.00/17.00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash hands thoroughly after handling.

P280 Wear eye protection.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

EUH210 Only for professional use. Safety data sheet available on request.

Product contents:

soap, anionic surfactants, non-ionic surfactants < 5 %

The product also contains: Perfumes

Preservatives: 1,2-BENZISOTIAZOL-3(2H)-ONE

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

Not Applicable, the product is a mixture.

3.2. Mixtures

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

>= 3% - < 5% ETHANOL

REACH No.: 01-2119457610-43, Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6

 2.6/2 Flam. Liq. 2 H225

 3.3/2 Eye Irrit. 2 H319

Specific Concentration Limits:
C >= 50%: Eye Irrit. 2 H319

>= 3% - < 5% ALKYL POLYGLUCOSIDE

REACH No.: 01-2119488530-36, CAS: 68515-73-1, EC: 500-220-1

 3.3/1 Eye Dam. 1 H318

Specific Concentration Limits:
9,9% <= C < 10%: Eye Irrit. 2 H319
C >= 10%: Eye Dam. 1 H318

>= 3% - < 5% ALKYL ETHER SULFATE C12-14, SODIUM SALT

REACH No.: 01-2119488639-16, CAS: 68891-38-3, EC: 500-234-8

 3.2/2 Skin Irrit. 2 H315

 3.3/1 Eye Dam. 1 H318

4.1/C3 Aquatic Chronic 3 H412

Specific Concentration Limits:
5% <= C < 10%: Eye Irrit. 2 H319
C >= 10%: Eye Dam. 1 H318

>= 1% - < 3% POTASSIUM COCOATE

CAS: 61789-30-8, EC: 263-049-9

 3.3/2 Eye Irrit. 2 H319

 3.2/2 Skin Irrit. 2 H315

>= 0.1% - < 0.25% PROPAN-2-OL

REACH No.: 01-2119457558-25, Index number: 603-117-00-0, CAS: 67-63-0, EC: 200-661-7

 2.6/2 Flam. Liq. 2 H225

 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

>= 0.01% - < 0.1% BUTANONE; ETHYL METHYL KETONE

REACH No.: 01-2119457290-43, Index number: 606-002-00-3, CAS: 78-93-3, EC: 201-159-0

 2.6/2 Flam. Liq. 2 H225

 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

EUH066

>= 0.0015% - < 0.01% SODIUM HYDROXIDE

REACH No.: 01-2119457892-27, Index number: 011-002-00-6, CAS: 1310-73-2, EC: 215-185-5

 3.2/1A Skin Corr. 1A H314

 3.3/1 Eye Dam. 1 H318

 2.16/1 Met. Corr. 1 H290

Specific Concentration Limits:
0,5% <= C < 2%: Skin Irrit. 2 H315
0,5% <= C < 2%: Eye Irrit. 2 H319
2% <= C < 5%: Skin Corr. 1B H314
C >= 5%: Skin Corr. 1A H314

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.
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
Acute effects:
Skin and eye irritation for contact
Irritation interior system if swallowed.

Until revison date of this document, are unknown chronic effects from the mixture contact with skin, eyes, inhalation, ingestion.
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:
Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

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
The mixture does not contain ingredients classified as explosive according to EC Regulation 1272/2008 (CLP).
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.
The mixture does not contain ingredients classified as explosive according to EC Regulation 1272/2008 (CLP).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non emergency personnel:
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.
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 authorities.
Suitable material for taking up: absorbing material, organic, sand
6.3. Methods and material for containment and cleaning up
Wash with plenty of water. To converge the product in containment tanks.

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 away from sunlight.
Store in a cool and well ventilated place.
Do not store in open or unlabeled containers.
Store away from heat sources.
Keep away from food, drink and feed.
Incompatible materials:
Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability. see also 1.2 and 7.2.
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)
None in particular, see paragraph 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Until the revision date of this document, no experimental data are available for the mixture. elow, listed occupational exposure limits, if available, for the components listed in paragraph 3.2.
ETHANOL - CAS: 64-17-5
ACGIH - STEL(15min): 1884 mg/m3, 1000 ppm
PROPAN-2-OL - CAS: 67-63-0
ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3
EU - TWA(8h): 600 mg/m3, 200 ppm - STEL(15min): 900 mg/m3, 300 ppm
ACGIH - TWA(8h): 590 mg/m3, 200 ppm - STEL(15min): 885 mg/m3, 300 ppm - Notes: BEI - URT irr, CNS and PNS impair
SODIUM HYDROXIDE - CAS: 1310-73-2
ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

DNEL Exposure Limit Values
Until the revision date of this document, no experimental data are available for the mixture. Below, listed the DNEL exposure limits, if available, for the components listed in paragraph 3.2.
ETHANOL - CAS: 64-17-5
Worker Industry: 950 mg/m3 - Consumer: 114 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 343 mg/kg - Consumer: 206 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/day
Consumer: 87 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: bw/day

ALKYL POLYGLUCOSIDE - CAS: 68515-73-1
Worker Industry: 595000 mg/kg - Consumer: 357000 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 420 mg/m3 - Consumer: 124 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 35.7 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
ALKYL ETHER SULFATE C12-14, SODIUM SALT - CAS: 68891-38-3
Worker Industry: 2750 mg/kg - Consumer: 1650 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 175 mg/m3 - Consumer: 52 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 15 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 0.079 mg/cm2 - Consumer: 0.132 mg/cm2 - Exposure: Human Dermal - Frequency: Long Term, local effects
PROPAN-2-OL - CAS: 67-63-0
Worker Industry: 888 mg/kg - Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 500 mg/m3 - Consumer: 89 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3
Worker Industry: 600 mg/m3 - Consumer: 106 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 1161 mg/kg - Consumer: 412 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/d
Consumer: 31 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: bw/d
SODIUM HYDROXIDE - CAS: 1310-73-2
Worker Industry: 1 mg/m3 - Consumer: 1 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 2 % - Consumer: 2 % - Exposure: Human Dermal - Frequency: Short Term, local effects

PNEC Exposure Limit Values

Until the revision date of this document, no experimental data are available for the mixture. Below, listed the PNEC exposure limits, if available, for the components listed in paragraph 3.2.

ETHANOL - CAS: 64-17-5
Target: Fresh Water - Value: 0.96 mg/l
Target: Marine water - Value: 0.79 mg/l
Target: Freshwater sediments - Value: 3.6 mg/kg
Target: Marine water sediments - Value: 2.9 mg/kg
Target: Microorganisms in sewage treatments - Value: 580 mg/l
Target: Soil (agricultural) - Value: 0.63 mg/kg
ALKYL POLYGLUCOSIDE - CAS: 68515-73-1
Target: Fresh Water - Value: 0.176 mg/l
Target: Marine water - Value: 0.0176 mg/l
Target: Microorganisms in sewage treatments - Value: 560 mg/l
Target: Freshwater sediments - Value: 1.516 mg/kg
Target: Marine water sediments - Value: 0.152 mg/kg
Target: Soil (agricultural) - Value: 0.654 mg/kg
Target: Food chain - Value: 111.11 mg/kg
ALKYL ETHER SULFATE C12-14, SODIUM SALT - CAS: 68891-38-3
Target: Marine water - Value: 0.024 mg/l

Target: Microorganisms in sewage treatments - Value: 10000 mg/l
Target: Marine water sediments - Value: 0.09168 mg/kg
Target: Soil (agricultural) - Value: 7.5 mg/kg
Target: Freshwater sediments - Value: 0.9168 mg/kg
Target: Fresh Water - Value: 0.24 mg/l

PROPAN-2-OL - CAS: 67-63-0
Target: Microorganisms in sewage treatments - Value: 2251 mg/l
Target: Marine water sediments - Value: 552 mg/kg
Target: Soil (agricultural) - Value: 28 mg/kg
Target: Marine water - Value: 140.9 mg/l

BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3
Target: Fresh Water - Value: 55.8 mg/l
Target: Marine water - Value: 55.8 mg/l
Target: Freshwater sediments - Value: 284.74 mg/kg
Target: Marine water sediments - Value: 284.7 mg/kg
Target: Microorganisms in sewage treatments - Value: 709 mg/l
Target: Soil (agricultural) - Value: 22.5 mg/kg

8.2. Exposure controls

Eye protection:
Use close fitting safety goggles, don't use eye lens.(EN 166)

Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton (EN 14605 in case of splashes or EN 13982 in case of dust)

Protection for hands:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. (ex. EN 388 - EN 374 protection factor 6, corresponding to a breakthrough time >480 minutes).
Due to great diversity of types, observe the operating instructions of the manufacturer with respect to substances listed in paragraph 3.2.

Respiratory protection:
Not needed for normal use.

Thermal Hazards:
The product is not flammable or explosive - see paragraph 2.1. The product contains no explosive components.
Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

Environmental exposure controls:
Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.
See also section 6.2.

Appropriate engineering controls:
No further technical checks suitable for your product under normal conditions.
See also section 1.2, section 7 and Exposure Scenario - Annex I of this document.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	Visual	--
Colour:	Violet	Visual	--
Odour:	Floral	Olfactory	--
Odour threshold:	Evident	Olfactory	--
Melting point/freezing point:	Not Relevant	--	Parameter not relevant for the type of product
Boiling point or initial	>= 100°	--	--

boiling point and boiling range:			
Flammability:	Non-flammable	--	Estimated parameter on chemical / physical properties of components.
Lower and upper explosion limit:	Not Relevant	--	Parameter not relevant for the type of product
Flash point:	44 ° C	EN ISO 3679	--
Auto-ignition temperature:	Not Relevant	--	Parameter not relevant for the type of product
Decomposition temperature:	Not Relevant	--	Parameter not relevant for the type of product
pH:	9,9 +/- 0,5	Instrumental control	--
Kinematic viscosity:	Not Relevant	--	Parameter not relevant. Not viscous mixture.
Solubility in water:	Total	--	Internal tests
Solubility in oil:	Partial	--	Internal tests
Partition coefficient n-octanol/water (log value):	< 1000	--	Value estimated based on the solubility of the mixture.
Vapour pressure:	Not Relevant	--	Parameter not relevant for the type of product
Density and/or relative density:	1.025 g/ml	Instrumental control	--
Relative vapour density:	Not Relevant	--	Parameter not relevant for the type of product
Particle characteristics:			
Particle size:	Not Relevant	--	Parameter not relevant for the type of product

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.
Do not use in combination with other products.

10.2. Chemical stability

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.

10.3. Possibility of hazardous reactions

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.
See also scetion 7.2.
In normal conditions no dangerous reactions of the mixture

10.4. Conditions to avoid

Different uses than recommended. Do not use in combination with other products. See also 1.2 and 7.2
Avoid direct sunlight and exposure to heat sources.

10.5. Incompatible materials

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability. see also 1.2 and 7.2.

10.6. Hazardous decomposition products

Until the revision date of this document, no adverse effects and symptoms to exposure of the product are known, including chemical reactivity and instability.
Do not use in combination with other products.

SECTION 11: Toxicological information

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

Toxicological information of the product:

RATIO RB-4 ECOLABEL

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Below are reported, if available, the toxicological information of the components listed in paragraph 3.2.

ETHANOL - CAS: 64-17-5

a) acute toxicity:

Test: LC50 - Route: Inhalation Vapour - Species: Rat = 116.9 mg/l - Duration: 4h - Source: OECD403

Test: LD50 - Route: Oral - Species: Rat = 10470 mg/kg - Source: OECD401

b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit Negative - Source: OECD404

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive - Source: OECD405

e) germ cell mutagenicity:

Negative

f) carcinogenicity:

Negative

g) reproductive toxicity:

Negative

h) STOT-single exposure:

Negative
i) STOT-repeated exposure:
Negative
ALKYL POLYGLUCOSIDE - CAS: 68515-73-1
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: OECD 401
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: OECD 402
b) skin corrosion/irritation:
Test: Skin Irritant Negative
c) serious eye damage/irritation:
Test: Eye Corrosive Positive - Source: OECD 405
d) respiratory or skin sensitisation:
Test: Skin or Resp. Sensitization Negative - Source: OECD 406
e) germ cell mutagenicity:
Test: Mutagenesis Negative - Source: Ames test - OECD 471
ALKYL ETHER SULFATE C12-14, SODIUM SALT - CAS: 68891-38-3
a) acute toxicity:
Test: LD50 - Route: Oral > 2870 mg/kg - Source: OECD 401
Test: LD50 - Route: Skin > 2000 mg/kg - Source: OECD 402
b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin Positive - Source: OECD 404
c) serious eye damage/irritation:
Test: Eye Corrosive Positive - Source: OECD 405
d) respiratory or skin sensitisation:
Test: Skin or Resp. Sensitization Negative - Source: OECD 406
e) germ cell mutagenicity:
Test: Mutagenesis Negative - Source: Ames Test
POTASSIUM COCOATE - CAS: 61789-30-8
a) acute toxicity:
Test: LD50 - Route: Oral > 2000 mg/kg
b) skin corrosion/irritation:
Test: Skin Irritant Yes
c) serious eye damage/irritation:
Test: Eye Corrosive Yes
PROPAN-2-OL - CAS: 67-63-0
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat > 10000 ppm - Duration: 6h
Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit No - Source: OECD 404
c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Yes - Source: OECD 405
d) respiratory or skin sensitisation:
Test: Skin or Resp. Sensitization Negative
e) germ cell mutagenicity:
Test: Mutagenesis Negative
g) reproductive toxicity:
Test: NOAEL - Route: Oral - Species: Rabbit = 480 mg/kg
BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 2054 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 10 ml/kg
SODIUM HYDROXIDE - CAS: 1310-73-2
b) skin corrosion/irritation:
Test: Skin Corrosive Positive

c) serious eye damage/irritation:
Test: Eye Corrosive Positive
e) germ cell mutagenicity:
Negative
h) STOT-single exposure:
Negative
i) STOT-repeated exposure:
Negative

11.2. Information on other hazards
Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Until the revision date of this document, are not available experimental data on the mixture.
Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

RATIO RB-4 ECOLABEL
Not classified for environmental hazards
Based on available data, the classification criteria are not met

ETHANOL - CAS: 64-17-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 14200 mg/l - Duration h: 96 - Notes: Pimephales promelas
Endpoint: EC50 - Species: Daphnia = 5012 mg/l - Duration h: 48 - Notes: Ceriodaphnia dubia
Endpoint: EC50 - Species: Algae = 275 mg/l - Duration h: 72 - Notes: Chlorella vulgaris

ALKYL POLYGLUCOSIDE - CAS: 68515-73-1
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 100 mg/l - Notes: Brachydanio rerio
Endpoint: EC50 - Species: Daphnia > 100 mg/l - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae > 10 mg/l - Notes: Scenedesmus subspicatus
Endpoint: EC0 - Species: Microorganisms / Effect on activated sludge: > 100 mg/l - Notes: Pseudomonas putida
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish > 1 mg/l - Notes: Brachydanio rerio
Endpoint: NOEC - Species: Daphnia > 1 mg/l - Notes: Daphnia magna

ALKYL ETHER SULFATE C12-14, SODIUM SALT - CAS: 68891-38-3
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 7.1 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 7.4 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 27.7 mg/l - Duration h: 72
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish = 0.14 mg/l - Duration h: 672
Endpoint: NOEC - Species: Daphnia = 0.27 mg/l - Duration h: 504
Endpoint: NOEC - Species: Algae = 0.95 mg/l - Duration h: 72

POTASSIUM COCOATE - 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: 72

PROPAN-2-OL - CAS: 67-63-0
a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 9640 mg/l - Duration h: 48 - Notes: Pimephales promelas
Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae = 1800 mg/l - Duration h: 168 - Notes: Scenedesmus quadricauda

BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 2993 mg/l - Duration h: 96 - Notes: Pimephales promelas
Endpoint: EC50 - Species: Daphnia = 308 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: EC50 - Species: Algae = 1289 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

SODIUM HYDROXIDE - CAS: 1310-73-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 35 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 40.4 mg/l - Duration h: 48 - Notes: Ceriodaphnia dubia

12.2. Persistence and degradability

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

ALKYL POLYGLUCOSIDE - CAS: 68515-73-1

Biodegradability: Persistence - Duration: 28 days - %: 99

ALKYL ETHER SULFATE C12-14, SODIUM SALT - CAS: 68891-38-3

Biodegradability: Persistence

BUTANONE; ETHYL METHYL KETONE - CAS: 78-93-3

Biodegradability: Persistence - Test: OECD 301D - Duration: 28 days - %: 98

The surfactant(s) contained in this preparation complies with the biodegradability criteria laid down in Regulation (EC) No 648/2004 on detergents. All supporting data are kept available to the competent authorities of the Member States and will be provided to those authorities if they so request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

ETHANOL - CAS: 64-17-5

Bioaccumulation: Slightly bioaccumulative - Test: LogKow -0.35 - Notes: 24°C

12.4. Mobility in soil

Until the revision date of this document, are not available experimental data on the mixture. Below are reported, if available, the eco-toxicological information of the components listed in paragraph 3.2.

Not applicable

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

Until the revision date of this document, unknown adverse effects and symptoms towards the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Do not discharge into the ground or into drains.
See also section 6.

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
Not applicable
14.3. Transport hazard class(es)
Not applicable
14.4. Packing group
Not applicable
14.5. Environmental hazards
ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No
14.6. Special precautions for user
Not applicable
14.7. Maritime transport in bulk according to IMO instruments
Not applicable

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:
None
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, for instructions on safe mangling you see Sections 7 and 8 and the exposure scenario - Annex I of this document.
A Chemical Safety Assessment has been carried out for the mixture.
No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:
None

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.
H314 Causes severe skin burns and eye damage.
H290 May be corrosive to metals.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
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
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
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
Eye Irrit. 2, H319	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.
EC0/10/20/50/100:	Effective concentration, for 0/10/20/50/100 percent of test population.
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.
LC0/10/20/50/100:	Lethal concentration, for 0/10/20/50/100 percent of test population.
LD0/10/20/50/100:	Lethal dose, for 0/10/20/50/100 percent of test population.
NOEC:	No Observed Effect Concentration
NOAEL(R)/NOAEC:	No Observed Adverse Effect Level(Repeated)/Concentration
OECD:	Organisation for Economic Co-operation and Development
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.

ANEXO I

PRODUTO PROFISSIONAL - DETERGENTE PARA SUPERFÍCIES DURAS

Título do cenário de exposição	
Detergente para a limpeza geral: Processo manual	
Descrição de uso	
Setor de uso	SU22 – Uso profissional
Categorias do produto	PC35 – Produtos para a lavagem e a limpeza (produtos base solvente incluídos)
Descrição das atividades/dos processos incluídos no cenário de exposição	
Se necessário, diluir o produto em água conforme as modalidades indicadas no rótulo.	
Utilizar o produto seguindo as modalidades descritas no rótulo.	
Deixar agir	
Enxaguar, se necessário.	
Duração e frequência de uso	
Utilização	- 1 vez por dia para detergentes usados diariamente para a limpeza. - Periódica para detergentes específicos
Os valores máximos dos componentes, caso sejam pertinentes, estão indicados na seção 8 da FDS.	
Estado físico da preparação e concentração	
Líquido. A diluir ou pronto para uso conforme o tipo de produto.	
A classificação da mistura está indicada na seção 2 da FDS do produto e no rótulo do produto.	
A classificação baseia-se na classe dos componentes da mistura e nas propriedades físico-químicas indicadas na seção 9 da FDS.	
Condições de utilização	
Temperatura ambiente	
É suficiente uma boa ventilação do local de trabalho.	
Proteção	
Consultar a seção 8 da FDS do produto para mais informações sobre os DPI.	Pressupõe-se a formação do trabalhador para o uso e a manutenção dos DPI.
Não comer ou beber, não fumar.	Evitar o contato com a pele lesionada.
Não expor a chama direta.	Não misturar com outros produtos.
Lavar as mãos depois do uso.	
Ver seção 6 da FDS em caso de derrame acidental.	
Seguir as instruções de uso indicadas no rótulo ou na ficha técnica. Recomendam-se as boas práticas de higiene no local de trabalho, tal como especificado na seção 7 da FDS.	
Medidas ambientais	
Ver seção 6 da FDS em caso de derrame acidental.	
Ver seção 12 da FDS para as informações toxicológicas da mistura e dos componentes perigosos.	
Ver seção 13 da FDS para o escoamento.	

Notas:
FDS: Ficha de Segurança
EPI's: Equipamentos de Proteção Individual