
ENERGY PERFORMER

Safety Data Sheet dated 8/3/2021, version

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

1.1. Product identifier

Mixture identification:

Trade name: ENERGY PERFORMER

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

Recommended use:

Cleaner (for industrial and professional use)

Uses advised against:

All uses not mentioned in the uses recommended

1.3. Details of the supplier of the safety data sheet

Company:

Lavapiù S.r.l.

Strada di Circonvallazione, 27

39057 Appiano sulla Strada del Vino, ITALY

P.I. 02636010213

Tel. 075-5279943

Competent person responsible for the safety data sheet:

E-mail: remo.falchi@lavapiu.com

1.4. Emergency telephone number

Lavapiù S.r.l. – Phone: +39 075-5279943

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)



Warning, Met. Corr. 1, May be corrosive to metals.



Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.



Danger, Eye Dam. 1, Causes serious eye damage.



Warning, Skin Sens. 1, May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

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2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements:

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

P280 Wear protective gloves/clothing and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Special Provisions:

EUH208 Contains potassium dodecyl benzenesulfonate. May produce an allergic reaction.

Contains

C13-C15 Oxoalcohol + 7EO

potassium hydroxide; caustic potash

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.- hydroxy-, phosphate

tetrasodium ethylene diamine tetraacetate

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.


3.2. Mixtures

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


3% - 5% C13-C15 Oxoalcohol + 7EO

CAS: 157627-86-6, EC: 500-337-8

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 3.1/4/Oral Acute Tox. 4 H302


4.1/C3 Aquatic Chronic 3 H412

 3.3/1 Eye Dam. 1 H318

1% - 3% potassium hydroxide; caustic potash

REACH No.: 01-2119487136-33, Index number: 019-002-00-8, CAS: 1310-58-3, EC: 215-181-3

 2.16/1 Met. Corr. 1 H290

 3.1/4/Oral Acute Tox. 4 H302

 3.2/1A Skin Corr. 1A H314

1% - 3% Silicic acid, potassium salt

REACH No.: 01-2119456888-17, CAS: 1312-76-1, EC: 215-199-1

 3.3/2 Eye Irrit. 2 H319

 3.2/2 Skin Irrit. 2 H315

1% - 3% Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.- hydroxy-, phosphate


REACH No.: 01-2120771013-65, CAS: 39464-70-5, EC: 609-691-9


 3.3/1 Eye Dam. 1 H318


1% - 3% tetrasodium ethylene diamine tetraacetate

REACH No.: 01-2119486762-27, Index number: 607-428-00-2, CAS: 64-02-8, EC: 200-573-9

 2.16/1 Met. Corr. 1 H290

 3.1/4/Oral Acute Tox. 4 H302

 3.1/4/Inhal Acute Tox. 4 H332


 3.3/1 Eye Dam. 1 H318


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 3.9/2 STOT RE 2 H373

1% - 3% potassium dodecyl benzenesulfonate


CAS: 27177-77-1, EC: 248-296-2

 3.4.2/1 Skin Sens. 1 H317


 3.3/1 Eye Dam. 1 H318

0.1% - 0.25% trisodium nitrilotriacetate

REACH No.: 01-2119519239-36, Index number: 607-620-00-6, CAS: 5064-31-3, EC: 225-768-6


 3.1/4/Oral Acute Tox. 4 H302


 3.3/2 Eye Irrit. 2 H319


 3.6/2 Carc. 2 H351

2 ppm glutaral; glutaraldehyde; 1,5-pentanedial

REACH No.: 01-2119455549-26, Index number: 605-022-00-X, CAS: 111-30-8, EC: 203-856-5


 3.1/2/Inhal Acute Tox. 2 H330


 3.1/3/Oral Acute Tox. 3 H301

 3.2/1B Skin Corr. 1B H314

 3.4.1/1 Resp. Sens. 1 H334

 3.4.2/1A Skin Sens. 1A H317

 4.1/A1 Aquatic Acute 1 H400 M=1.

 4.1/C2 Aquatic Chronic 2 H411

EUH071

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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- 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 ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do NOT induce vomiting.

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

- Inhalation: Irritation of the respiratory tract
- Eye contact: eye burns. It can cause ulceration of the conjunctiva and cornea.
- Contact with the skin: intense burning and penetrating ulcers in the skin.
- After ingestion: Corrosions in the mouth, esophagus, can cause internal perforation

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 sprayed.
 - Carbon dioxide (CO₂).
 - Foam
- Extinguishing media which must not be used for safety reasons:
 - Strong water jet

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 .
- Standard fire fighting clothing such as an open-air compressor (EN 137), full flame retardant (EN469), flame retardant gloves (EN659) and firefighter boots (OH A29 or A30)

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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 authorities.
 - Suitable material for taking up: absorbing material, organic, sand
 - 6.3. Methods and material for containment and cleaning up
 - Collect spilled material mechanically. Wash the floor with water after harvesting. Introduce the collected material into clean and labeled containers. If necessary, start the reclamation procedure provided for in Legislative Decree 152/2006, Part IV, Title V.
 - 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:
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Protect from direct sunlight
 - Keep the product in the original containers; do not mix with other products
 - Incompatible material: Aluminum. Keep away from food, drink and feed.
 - Store in a cool and ventilated place.
 - Keep the product in the original containers; do not mix with other products. See also paragraph 10 below.
 - Indication for the premises:
 - Adequately ventilated rooms.
- 7.3. Specific end use(s)
 - None in particular

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

potassium hydroxide; caustic potash - CAS: 1310-58-3

ACGIH - STEL: Ceiling 2 mg/m³ - Notes: URT, eye, and skin irr

TWA - STEL: Ceiling 2 mg/m³

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.- hydroxy-, phosphate - CAS: 39464-70-5

TWA - TWA: 1 mg/m³ - Behaviour: Indicative - Notes: Indicative limit values for occupational exposure to chemical agents

STEL - TWA: 2 mg/m³ - Behaviour: Indicative - Notes: Indicative limit values for occupational exposure to chemical agents

TWA - TWA: 1 mg/m³ - Behaviour: Indicative - Notes: Commission Directive 2000/39 / EC on the establishment of a first list of indicative limit values

STEL - TWA: 2 mg/m³ - Behaviour: Indicative - Notes: Commission Directive 2000/39 / EC on the establishment of a first list of indicative limit values

TWA - TWA: 1 mg/m³ - Behaviour: Indicative - Notes: USA. ACGIH Threshold limit value(TLV)

STEL - TWA: 3 mg/m³ - Behaviour: Indicative - Notes: USA. ACGIH Threshold limit value (TLV)

glutaral; glutaraldehyde; 1,5-pentanedial - CAS: 111-30-8

ACGIH - STEL: Ceiling 0.05 ppm - Notes: DSEN, RSEN, A4 - URT, skin, and eye irr, CNS impair

MAK - STEL: 0.05 ppm

DNEL Exposure Limit Values

potassium hydroxide; caustic potash - CAS: 1310-58-3

Worker Professional: 1 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Effects of long-term toxicity

Silicic acid, potassium salt - CAS: 1312-76-1

Worker Professional: 5.61 mg/m³ - Consumer: 1.38 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 1.49 mg/kg bw/d - Consumer: 0.74 mg/kg bw/d - Exposure: 4 - Frequency: Long Term, systemic effects

Consumer: 0.74 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

Worker Professional: 1.5 mg/m³ - Consumer: 0.6 mg/m³ - Exposure: Inhalation - Frequency: Long Term (repeated)

Worker Professional: 3 mg/m³ - Consumer: 1.2 mg/m³ - Exposure: Inhalation - Frequency: Short Term (acute)

Consumer: 25 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term (repeated)

trisodium nitrilotriacetate - CAS: 5064-31-3

Worker Professional: 2.4 mg/m³ - Consumer: 9.6 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 0.9 mg/kg bw/d - Exposure: Human Oral - Frequency: Short Term, systemic effects

Worker Professional: 0.8 mg/m³ - Consumer: 3.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 0.3 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

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glutaral; glutaraldehyde; 1,5-pentanedial - CAS: 111-30-8

Worker Professional: 0.5 mg/m³ - Exposure: Human Inhalation - Frequency: Local acute effects

Worker Professional: 0.25 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

PNEC Exposure Limit Values

Silicic acid, potassium salt - CAS: 1312-76-1

Target: Fresh Water - Value: 7.5 mg/l

Target: Marine water - Value: 1 mg/l

Target: occasional issue - Value: 7.5 mg/l

Target: Planta de purificación - Value: 348 mg/l

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

Target: Fresh Water - Value: 2.2 mg/l

Target: Water (intermittent release) - Value: 1.2 mg/l

Target: Marine water - Value: 0.22 mg/l

Target: Soil

- Value: 0.72 mg/kg

Target: Planta de purificación - Value: 43 mg/l

trisodium nitrilotriacetate - CAS: 5064-31-3

Target: Fresh Water - Value: 0.93 mg/l

Target: Marine water - Value: 0.093 mg/l

Target: occasional issue - Value: 0.8 mg/l

glutaral; glutaraldehyde; 1,5-pentanedial - CAS: 111-30-8

Target: Fresh Water - Value: 0.0025 mg/l

Target: Marine water - Value: 0.00025 mg/l

Target: occasional issue - Value: 0.006 mg/l

Target: Freshwater sediments - Value: 5.27 mg/kg

Target: Soil

- Value: 0.03 mg/kg

8.2. Exposure controls

Eye protection:

Use closed safety goggles, do not use eye lenses. Use safety goggles with side splash protection type EN166.

Skin protection:

Wear clothing that guarantees total protection for the skin, eg. in cotton, rubber, PVC or viton. Body protection: Acid-resistant clothing or plastic apron or full coveralls (EN 340-EN13034). Lower limb protection: Chemical resistant boot.

Hand protection:

Use protective gloves that guarantee total protection, in PVC, neoprene or rubber (EN 374 1/2/3).

Gloves with protection factor 6 are recommended: breakthrough time > 480min, min thickness 0.3 mm. (Ex: Natural rubber - NR (0,5 mm); Polychloroprene - CR (0,5 mm); Nitrile - NBR (0,35 mm); butyl rubber (0,5 mm); FKM (0,4 mm) ; PVC (0.5 mm)).

Change any gloves used in the presence of signs of wear, cracks or internal contamination.

Respiratory protection:

Use adequate respiratory protection (EN 141). Avoid breathing vapors.

Concentration levels in the air should be kept below the exposure limits. When for certain operations the concentration in the air exceeds the TLV, respiratory protection is required: use EN 140 approved masks (Filter

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Type EN143: A2 B2).

Thermal risks:

Wear heat-resistant gloves in case of thermal hazards.

Environmental exposure controls:

Avoid the formation of mists or aerosols. Do not eat or drink while handling. Observe general hygiene measures for the use of chemicals

Appropriate technical controls:

Nobody

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	colorless clear liquid	--	--
Odour:	lightly scented	--	--
Odour threshold:	Not determined as considered not relevant for the characterization of the product	--	--
pH:	Ca. 12,5	--	--
Melting point / freezing point:	Ca. -5°C	--	--
Initial boiling point and boiling range:	>100 °C	--	--
Flash point:	>100 °C	--	--
Evaporation rate:	Not determined as considered not relevant for the characterization of the product	--	--
Solid/gas flammability:	Not Applicable	--	--
Upper/lower flammability or explosive limits:	Not determined as considered not relevant for the characterization of the product	--	--
Vapour pressure:	Not determined as considered not relevant for the characterization of the product	--	--
Vapour density:	Not determined as considered not relevant for the characterization of the product	--	--
Relative density:	Ca. 1,07 g/ml	--	--
Solubility in water:	Complete	--	--
Solubility in oil:	Insoluble	--	--
Partition coefficient (n-octanol/water):	Not determined as considered not relevant for the characterization of the product	--	--
Auto-ignition temperature:	Not determined as considered not relevant for the characterization of the product	--	--
Decomposition temperature:	Not determined as considered not relevant for the characterization of the product	--	--

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Viscosity:	Not determined as considered not relevant for the characterization of the product	--	--
Explosive properties:	Not explosive	--	--
Oxidizing properties:	Not oxidizing	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not determined as considered not relevant for the characterization of the product	--	--
Fat Solubility:	Not determined as considered not relevant for the characterization of the product	--	--
Conductivity:	Not determined as considered not relevant for the characterization of the product	--	--
Substance Groups relevant properties	Not determined as considered not relevant for the characterization of the product	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

- Gas is produced in contact with metals
- Contact with strong acids can cause violent reactions.

10.2. Chemical stability

- Stable under normal conditions.

10.3. Possibility of hazardous reactions

- Corrosive power towards metals.

10.4. Conditions to avoid

- Absence of ventilation, heating, contact with metals, acids, combustible and reducing materials. Open containers.

10.5. Incompatible materials

- Light metals, alkali metals, metals. Contact with aluminum causes the release of gaseous hydrogen.

10.6. Hazardous decomposition products

- It decomposes on heating, developing COx oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

Not available

Toxicological information of the main substances found in the product:

C13-C15 Oxalcohol + 7EO - CAS: 157627-86-6

a) acute toxicity:

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

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- Test: DL50 - Route: Skin - Species: Rat > 2000 MGKGBWD - Source: OECD 402
- b) skin corrosion/irritation:
Test: Skin Irritant Negative
- c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Positive - Notes: irreversible damage (test di Draize)
potassium hydroxide; caustic potash - CAS: 1310-58-3
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 365 mg/kg
- b) skin corrosion/irritation:
Test: Skin Corrosive Positive
- c) serious eye damage/irritation:
Test: Eye Corrosive Positive
- d) respiratory or skin sensitisation:
Test: Respiratory Tract Irritant Positive
Silicic acid, potassium salt - CAS: 1312-76-1
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 5000 MGKGBWD
Test: LC50 - Route: Inhalation - Species: Rat > 2.06 g/m³
Test: LD50 - Route: Dermal - Species: Rat > 5000 MGKGBWD
- c) serious eye damage/irritation:
Test: Eye Irritant Positive - Notes: can cause discomfort and mild irritation
- e) germ cell mutagenicity:
Test: Mutagenesis Negative
- g) reproductive toxicity:
Test: Reproductive Toxicity Negative
- i) STOT-repeated exposure:
Test: NOAEL - Route: Oral - Species: Rat > 159 MGKGBWD
Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.- hydroxy-, phosphate - CAS: 39464-70-5
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
- b) skin corrosion/irritation:
Test: Skin Irritant Positive
- c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Positive
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: cavia Negative
tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1913 MGKGBWD - Notes: (test BASF)
Test: LC50 - Route: Inhalation - Species: Rat > 1 mg/l
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: DERMAL - Species: Rabbit Positive - Notes: (test BASF)
- c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Positive - Notes: (test BASF)

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g) reproductive toxicity:

Test: Reproductive Toxicity - Species: Animals Negative

i) STOT-repeated exposure:

Test: Respiratory Sensitization - Route: Inhalation Positive - Notes: The indications are derived from substances / products of similar composition

potassium dodecyl benzenesulfonate - CAS: 27177-77-1

c) serious eye damage/irritation:

Route: ocular Positive - Source: ECHA

d) respiratory or skin sensitisation:

Route: dermal Positive - Source: ECHA

trisodium nitrilotriacetate - CAS: 5064-31-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 1300 mg/kg

Test: LD50 - Route: dermal - Species: Rabbit 10000 mg/kg

Test: LD50 - Route: Inhalation - Species: Rat > 5 mg/l - Notes: male rat

b) skin corrosion/irritation:

Test: Skin Irritant Positive - Notes: Prolonged contact may cause mild skin irritation

c) serious eye damage/irritation:

Test: Eye Irritant Positive

d) respiratory or skin sensitisation:

Test: Respiratory Tract Irritant Positive - Notes: It can cause serious eye irritation and minor corneal injury

f) carcinogenicity:

Test: Genotoxicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity Negative

glutaral; glutaraldehyde; 1,5-pentanedial - CAS: 111-30-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 200 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant Positive

c) serious eye damage/irritation:

Test: Eye Irritant Positive

d) respiratory or skin sensitisation:

Test: Respiratory Sensitization Positive

Test: Skin Sensitization Positive

h) STOT-single exposure:

Source: The material is corrosive. Tract irritation or corrosion is possible - Notes: upper respiratory

i) STOT-repeated exposure:

Source:

Repeated skin exposure can cause absorption of quantities which - Notes: can cause death.

It can cause nausea or vomiting.

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If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as not available:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

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

C13-C15 Oxoalcohol + 7EO - CAS: 157627-86-6

a) Aquatic acute toxicity:

Endpoint: CL50 - Species: Fish > 1-10 mg/l - Duration h: 96 - Notes: Brachydanio rerio

Endpoint: CE50 - Species: Daphnia 1-10 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: CE50 - Species: Algae 1-10 mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia > 0.1-1 mg/l - Notes: CESIO

Endpoint: NOEC - Species: Algae > 0.1-1 mg/l - Notes: CESIO

Endpoint: NOEC - Species: Carassius Auratus > 0.1-1 mg/l - Notes: CESIO

c) Bacteria toxicity:

Endpoint: CE10 - Species: activated sludge > 1000 mg/l - Notes: (DEV-L2)

Silicic acid, potassium salt - CAS: 1312-76-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 146 mg/l - Duration h: 48 - Notes: (Leuciscus idus)

Endpoint: EC50 - Species: Daphnia > 146 mg/l - Duration h: 24 - Notes: (Daphnia magna)

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.-hydroxy-, phosphate - CAS: 39464-70-5

a) Aquatic acute toxicity:

Endpoint: B - Species: Danio rerio (zebrafish)

> 100 mg/l - Duration h: 96

Endpoint: LC50 - Species: 63 > 100 mg/l - Duration h: 96

Endpoint: EC50 - Species: 15 > 1000 mg/l - Duration h: 48

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

a) Aquatic acute toxicity:

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

Endpoint: EC50 - Species: Algae > 60 mg/l - Duration h: 72

Endpoint: NOEC - Species: Algae : 79.4 mg/l - Duration h: 72

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Endpoint: NOEC - Species: Algae : 48.4 mg/l - Duration h: 72
 Endpoint: LOEC - Species: Algae : 99.9 mg/l - Duration h: 72
 Endpoint: LOEC - Species: Algae : 60.6 mg/l - Duration h: 72
 Endpoint: LC50 - Species: Fish : 41 mg/l - Duration h: 96
 Endpoint: LC50 - Species: Fish : 159 mg/l - Duration h: 96
 Endpoint: LC50 - Species: Fish : 532 mg/l - Duration h: 96
 Endpoint: LC50 - Species: Fish > 25.7 mg/l - Duration h: 35 - Notes: d

trisodium nitrilotriacetate - CAS: 5064-31-3

a) Aquatic acute toxicity:

Endpoint: CL50 - Species: Fish 127 mg/l - Duration h: 96 - Notes: Pimephales promelas (Cavedano americano) -

Endpoint: CE50 - Species: Daphnia 560-1000 mg/l - Duration h: 48 - Notes: Daphnia magna (Pulce d'acqua grande) -

Endpoint: CE50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: Desmodesmus subspicatus (Scenedesmus subspicatus)

glutaral; glutaraldehyde; 1,5-pentanedial - CAS: 111-30-8

a) Aquatic acute toxicity:

Endpoint: CL50 - Species: Fish = 11.2 mg/l - Duration h: 96 - Notes: (Lepomis Macrochirus) - (OECD, 1998);

Endpoint: CL50 - Species: Fish = 3 mg/l - Duration h: 96 - Notes: (Oncorhynchus kisutch) - (Leung 2001 su ECHA, 2013)

Endpoint: CL50 - Species: 9 = 0.07 mg/l - Duration h: 48 - Notes: Acartia tonsa (copepode marino) - (ECHA, 2013)

Endpoint: CL50 - Species: Daphnia = 0.35 mg/l - Duration h: 48 - Notes: (Daphnia Magna) - (OECD, 1998)

Endpoint: CbE - Species: Algae = 0.38 mg/l - Duration h: 72 - Notes: (Scenedesmus subspicatus) - (ECHA, 2013)

Endpoint: CrE - Species: Algae = 0.6 mg/l - Duration h: 72 - Notes: (Scenedesmus subspicatus) - (ECHA, 2013)

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish = 1.0 mg/l - Notes: 62 day; (Oncorhynchus mykiss)-

Endpoint: NOEC - Species: Daphnia = 0.13 mg/l - Notes: 21 day; [OECD 211] (ECHA, 2013)

Endpoint: NOErC - Species: Algae = 0.025 mg/l - Duration h: 72 - Notes: (Scenedesmus subspicatus)- (ECHA, 2013)

12.2. Persistence and degradability

The surfactants contained in the product comply with the biodegradability criteria laid down in Regulation (EC) No 648/2004 on detergents

C13-C15 Oxoalcohol + 7EO - CAS: 157627-86-6

Biodegradability: Not persistent and Biodegradable - Test: BIODG16 - Duration h: 28 d - %: 60 - Notes: %

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl.-omega.- hydroxy-, phosphate - CAS: 39464-70-5

Biodegradability: Biodegradable

12.3. Bioaccumulative potential

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl.-omega.- hydroxy-, phosphate - CAS: 39464-70-5

Bioaccumulation: Low

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

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Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 1.8 - Duration h: 28 d - Notes:

Indicazioni su: tetrasodium ethylene diamine tetraacetate

Bioaccumulation: don't bioaccumulate in organisms

12.4. Mobility in soil

Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.- hydroxy-, phosphate - CAS: 39464-70-5

Mobility in soil: soluble in water

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. 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

ADR-UN number: 1760

IMDG-Un number: 1760

14.2. UN proper shipping name

ADR-Shipping Name: UN 1760 CORROSIVE LIQUID, N.O.S. (EDTA sodium salt, potassium hydroxide)

IMDG-Technical name: UN 1760 CORROSIVE LIQUID, N.O.S. (EDTA sodium salt, potassium hydroxide)

14.3. Transport hazard class(es)

ADR-Label: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

14.6. Special precautions for user

ADR-Transport category (Tunnel restriction code): (E)

IMDG-Technical name: UN 1760 CORROSIVE LIQUID, N.O.S. (EDTA sodium salt, potassium hydroxide)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

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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) 2015/830
 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)

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

Product :3

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
 Dir. 2004/42/EC (VOC directive)
 Regulation (EC) nr 648/2004 (detergents): Contains: <5% anionic surfactants, <5% non-ionic surfactants, <5% EDTA and salts thereof, perfumes, preservation agents (Glutaral)

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

Seveso III category according to Annex 1, part 1
 None

15.2. Chemical safety assessment

None
 No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.
 H412 Harmful to aquatic life with long lasting effects.
 H318 Causes serious eye damage.

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- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H319 Causes serious eye irritation.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H330 Fatal if inhaled.
- H301 Toxic if swallowed.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H400 Very toxic to aquatic life.
- H411 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. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
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 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
Resp. Sens. 1	3.4.1/1	Respiratory Sensitisation, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Carc. 2	3.6/2	Carcinogenicity, Category 2
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
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
Met. Corr. 1, H290	On basis of test data
Skin Corr. 1A, H314	On basis of test data (pH)

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Eye Dam. 1, H318	On basis of test data (pH)
Skin Sens. 1, H317	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.

Classification procedure in accordance to the regulation 1272/2008 (CLP).

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

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WGK: German Water Hazard Class.