SAFETY DATA SHEET

LanoPro Multi Cleaner EF-101

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	12.12.2019
Revision date	08.10.2025

1.1. Product identifier

Product name	LanoPro Multi Cleaner EF-101

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

Use of the substance / mixture	Cleaning/washing agent.
Uses advised against	It is not recommended for other uses than the areas mentioned above.
Industrial use	Yes
Professional use	Yes
Consumer use	No

1.3. Details of the supplier of the safety data sheet

Company name	LanoPro Production AS
Postal address	Smedveien 7
Postcode	1344
City	Haslum
Country	Norway
Telephone number	+47 40 00 15 14
Website	www.lanopro.com

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 22 59 13 00 Description: Toxic Information

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Irrit. 2; H319
Substance / mixture hazardous properties	Causes serious eye irritation.

2.2. Label elements

Hazard pictograms (CLP)

Signal word	Warning
Hazard statements	H319 Causes serious eye irritation.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P280 Wear protective gloves / protective clothing / eye protection / 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. P313 Get medical advice / attention.
Other label information (CLP)	Contents: Alcoholethoxylate Potassium hydroxide 2-(2-Butoxyethoxy)ethanol

2.3. Other hazards

Other hazards	The substance/mixture does not contain any components at 0.1% or more that are considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). Ecological information: The substance/mixture does not contain any components that are considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain any components that are considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU)

	2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
C9-11 Alcohol ethoxylat	CAS No.: 68439-46-3	Eye Irrit. 2; H319	5 - 10 %	
Alkyl glucoside	CAS No.: 54549-24-5 EC No.: 259-217-6 REACH Reg. No.: 01-2119492545-29	Eye Dam. 1; H318	< 2,5 %	
Tetrapotassium pyrophosphate	CAS No.: 7320-34-5 EC No.: 230-785-7 REACH Reg. No.: 01-2119489369-18-xxxx	Eye Irrit. 2; H319	1 - 5 %	
2-(2-Butoxyethoxy) ethanol	CAS No.: 112-34-5 EC No.: 203-961-6 Index No.: 603-096-00-8 REACH Reg. No.: 01-2119475104-44-xxxx	Eye Irrit. 2; H319	1 - 5 %	
Potassium hydroxide	CAS No.: 1310-58-3 EC No.: 215-181-3 Index No.: 019-002-00-8 REACH Reg. No.: 01-2119487136-33-xxxx	Skin Corr. 1A; H314 Acute Tox. 4; H302 Met. Corr. 1; H290 CLP classification, notes: SCL: Eye Irrit. 2; H319: 0,5 % ≤ C < 2 % Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % ATE oral: 333 mg/kg.	< 0,2 %	
Substance comments	For a complete list of risk phrases, look at section 16.			

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Immediately remove the patient from further exposure. General first aid if necessary. If in doubt, get medical advice. General first aid in the form of sumptomatic treatment should always be given if there is uncertainty regarding specific treatment.
Inhalation	General first aid, rest, warmth and fresh air.
Skin contact	Remove contaminated clothing immediately and rinse skin with rinsing cream. After this, apply a fatty cream.
Eye contact	Promptly rinse eyes with plenty of water for at least 15 minutes. Remove contact lenses and open eyes wide apart. Immediatley consult a doctor. Transport to a physician. Keep on flushing during transport.

Ingestion	DO NOT INDUCE VOMITING! Drink a few glasses of water or milk. Consult a physician for specific advice.
Recommended personal protective equipment for first aid responders	First aid personnel should take account of their own protection, and use the recommended personal protective equipment where there is a risk of exposure (see section 8).

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

Acute symptoms and effects	Inhalation: Gas or vapour may irritate respiatory system. Skin contact: Defatting, drying and cracking of skin. Eye contact: Causes serious eye irritation. Ingestion: Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

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

Medical treatment	Treat symptomatically.
Other information	When seeking medical advice, bring the safety data sheet or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Improper extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable.
Hazardous combustion products	In case of fire, toxic gases (CO, CO2, NOx) may be formed. Phosphorus.

5.3. Advice for firefighters

Personal protective equipment	General: Evacuate all personnel, use protective equipment for fire-fighting. Use self-contained breathing apparatus when the product is involved in fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Wear protective clothing as described in Section 8 of this safety data sheet.
For emergency responders	Wear protective equipment as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

Clean up	Absorb in vermiculite, dry sand or earth and place into containers. Flush area with water. "For larger spills, trenches should be dug or other suitable measures taken to contain the material from spreading. If material can be pumped out of the trenches, the collected material should be stored in an appropriate container."

6.4. Reference to other sections

Other instructions	See section 8 and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	For personal protection see section 8.

Protective safety measures

Advice on general occupational hygiene	Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store above freezing.

7.3. Specific end use(s)

Specific use(s)	For degreasing and cleaning.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
2-(2-Butoxyethoxy) ethanol	CAS No.: 112-34-5	Limit value (8 h) : 10 ppm Limit value (8 h) : 68 mg/m3 **Exposure limit letter** Letter code: E	
Potassium hydroxide	CAS No.: 1310-58-3	**Peak limitation value** Peak limitation value: 2 mg/m³	
Control parameters comments	References (laws/regulations): Norwegian regulation on exposure limits: "FOR-2011-12-06-1358. Explanation of the notations: E = The substance has an EU workplace exposure limit T = Ceiling value is an instantaneous value which indicates the maximum concentration of a chemical in the breathing zone that should not be exceeded.		

DNEL / PNEC

Substance	Alkyl glucoside
DNEL	**Group:** Consumer

	Route of exposure: Long term (repeated) - Inhalation - Systemic effect **Value:** 124 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Oral - Systemic effect **Value:** 35,7 mg/kg/bw/day **Group:** Professional **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 420 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Dermal - Systemic effect **Value:** 357000 mg/kg/bw/day **Group:** Professional **Route of exposure:** Long term (repeated) - Dermal - Systemic effect **Value:** 595000mg/kg/bw/day
PNEC	**Route of exposure:** Sewage treatment plant STP **Value:** 100 mg/l **Route of exposure:** Soil **Value:** 0,654 mg/kg dryweight **Route of exposure:** Saltwater sediments **Value:** 0,072 mg/kg dryweight **Route of exposure:** Freshwater sediments **Value:** 0,722 mg/kg dryweight **Route of exposure:** Freshwater **Value:** 0,176 mg/l **Route of exposure:** Saltwater **Value:** 0,018 mg/l
Substance	Tetrapotassium pyrophosphate
DNEL	**Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 0,68 mg/l **Group:** Industrial **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 2,79 mg/m3
PNEC	**Route of exposure:** Freshwater **Value:** 0,5 mg/l **Route of exposure:** Saltwater **Value:** 0,005 mg/l
Substance	2-(2-Butoxyethoxy)ethanol
DNEL	**Group:** Professional **Route of exposure:** Long term (repeated) - Inhalation - Systemic effect **Value:** 10 ppm **Group:** Consumer

	Route of exposure: Long term (repeated) - Dermal - Systemic effect **Value:** 10 mg/kg bodyweight/day **Group:** Professional **Route of exposure:** Long term (repeated) - Dermal - Systemic effect **Value:** 20 mg/kg bodyweight/day **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 34 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 34 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Oral - Systemic effect **Value:** 1,3 mg/kg bodyweight/day **Group:** Professional **Route of exposure:** Short term (acute) - Inhalation - Local effect **Value:** 101,2 mg/m3 **Group:** Professional **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 10 ppm
PNEC	**Route of exposure:** Soil **Value:** 0,32 mg/kg dw **Route of exposure:** Freshwater **Value:** 1 mg/l **Route of exposure:** Sewage treatment plant STP **Value:** 200 mg/l **Route of exposure:** Freshwater sediments **Value:** 4,4 mg/kg dw **Route of exposure:** Saltwater sediments **Value:** 4,4 mg/kg dw **Route of exposure:** Saltwater **Value:** 0,1 mg/l
Substance	Potassium hydroxide
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (local) **Value:** 1 mg/m³ **Group:** Consumer **Route of exposure:** Long-term inhalation (local) **Value:** 1 mg/m³
Summary of risk management measures, human	If this product contains components with occupational exposure limits, monitoring of personnel, work atmosphere, or biological parameters may be necessary to determine the effectiveness of exhaust ventilation or other

	protective measures, and/or the need for personal respiratory protection. Reference is made to European Standard EN 689 regarding methods for assessing exposure by inhalation of chemicals, and national, guiding documents for methods of determining hazardous substances.

8.2. Exposure controls

Safety signs


Precautionary measures to prevent exposure

Instruction on measures to prevent exposure	All handling to take place in well-ventilated area. Personal protecting equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Provide eyewash, quick drench. Avoid contact with eyes and prolonged skin contact. Avoid eating, drinking and smoking when using the product.

Eye / face protection

Suitable eye protection	Use CE-labeled safety goggles or face shield. EN 166

Hand protection

Suitable gloves type	Material : Nitrile rubber Glove thickness : 0,4 mm Breakthrough time: : > 480 min Material : Fluorinated rubber Glove thickness : 0,4 mm Breakthrough time: : > 480 min Use CE-labeled gloves according to EN 374.
Hand protection, comments	Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer

Skin protection

Skin protection remark	Overall suit shall be used where the work involves smudging to such an extent that ordinary working clothes do not protect the skin against contact with the product. Use CE-labeled protection equipment.

Respiratory protection

Recommended type of equipment	In case of inadequate ventilation: Use respiratory equipment with combination filter, type A/P2. Use CE-labeled protecting equipment. Use EN 140 for half face mask, EN 136 for full face mask. Particle filter: EN 143, Gasfilter: EN 14387.

Appropriate environmental exposure control

Environmental exposure controls	Prevent discharge into sewage, watercourses, or the ground.

Appropriate environmental exposure control

Exposure controls, comments	Measures/recommendations given under the various sections are based on assessments and implementations of information in received exposure scenarios (ES).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Light yellow.
Odour	Mild.
Odour limit	Comments: No data available.
pH	Status: In delivery state Value: ~ 11 Status: In aqueous solution Value: ~ 10,9 Method: 20%
Melting point / melting range	Value: 0 °C
Boiling point / boiling range	Value: ~ 100 °C
Flash point	Value: > 100 °C
Evaporation rate	Value: 0,1 Comments: (Butyl acetate=1). Applies to 2-(2-Butoxyethoxy)ethanol
Flammability	Not relevant.
Lower explosion limit with unit of measurement	Value: 0,69 % Comments: (102.2 °C). Applies to 2-(2-Butoxyethoxy)ethanol
Upper explosion limit with units of measurement	Value: 24,6 % Comments: Applies to 2-(2-Butoxyethoxy)ethanol
Vapour pressure	Value: 0,03 hPa Comments: Applies to 2-(2-Butoxyethoxy)ethanol Temperature: 25 °C
Vapour density	Value: 5,6 Comments: Applies to 2-(2-Butoxyethoxy)ethanol Reference gas: Air=1
Relative density	Value: ~ 1000 kg/m3
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/ water	Method: OECD TG 117 Comments: log Pow 1. Applies to 2-(2-Butoxyethoxy)ethanol Temperature: 20 °C pH: 7

Auto-ignition temperature	Value: 210 °C Comments: Applies to 2-(2-Butoxyethoxy)ethanol
Decomposition temperature	Comments: No data available.
Viscosity	Comments: Not determined.
Explosive properties	Not explosive.
Oxidising properties	Non oxidizing.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	No data available.

9.2.2. Other safety characteristics

Comments	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not known.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with acids.

10.5. Incompatible materials

Materials to avoid	Not known.

10.6. Hazardous decomposition products

Hazardous decomposition products	Hazardous decomposition products are not expected to form under normal storage. See section 5.2.

SECTION 11: Toxicological information

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

Acute toxicity	Comments: There is no test data available for the entire mixture.
Substance	C9-11 Alcohol ethoxylat
Acute toxicity	**Type of toxicity:** Acute

	Effect tested: LD50 **Route of exposure:** Oral **Value:** > 5000 mg/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** > 2000 mg/kg **Animal test species:** Rabbit
Substance	Alkyl glucoside
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Value:** > 2000 mg/kg **Animal test species:** Rat **Comments:** Analogy **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** > 2000 mg/kg **Animal test species:** Rabbit **Comments:** Analogy
Substance	Tetrapotassium pyrophosphate
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Value:** > 2000 mg/kg **Animal test species:** Mouse **Effect tested:** LD50 **Route of exposure:** Dermal **Method:** OECD Test-guideline 402 **Value:** > 2000 mg/kg **Animal test species:** Rabbit **Effect tested:** LC50 **Route of exposure:** Inhalation. **Method:** OECD Test-guideline 403 **Duration:** 4 hour(s) **Value:** > 1,1 mg/l **Animal test species:** Rat
Substance	2-(2-Butoxyethoxy)ethanol
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Method:** OECD Test-retningslinje 401 **Value:** 2410 mg/kg **Animal test species:** Mouse **Effect tested:** LD50 **Route of exposure:** Dermal **Method:** OECD Test-guideline 402 **Value:** 2764 mg/kg **Animal test species:** Rabbit

	Effect tested: LC50 **Route of exposure:** Inhalation. (dust / mist) **Method:** OECD Test-guideline 403 **Duration:** 2 h **Value:** > 29 ppm **Animal test species:** Rat **Comments:** Animal studies show no mortality within the specified exposure time.
Substance	Potassium hydroxide
Acute toxicity	**Effect tested:** LD50 **Route of exposure:** Oral **Method:** OECD Test-guideline 425 **Value:** 333 mg/kg **Animal test species:** rat

Other information regarding health hazards

Assessment of acute toxicity, classification	The classification criteria are not met based on available data.
Assessment of skin corrosion / irritation, classification	The classification criteria are not met based on available data.
Assessment of eye damage or irritation, classification	Causes eye irritation.
Assessment of respiratory sensitisation, classification	The classification criteria are not met based on available data.
Assessment of skin sensitisation, classification	The classification criteria are not met based on available data.
Assessment of germ cell mutagenicity, classification	The classification criteria are not met based on available data.
Assessment of carcinogenicity, classification	The classification criteria are not met based on available data.
Assessment of reproductive toxicity, classification	The classification criteria are not met based on available data.
Assessment of specific target organ toxicity - single exposure, classification	The classification criteria are not met based on available data.
Assessment of specific target organ toxicity - repeated exposure, classification	The classification criteria are not met based on available data.
Assessment of aspiration hazard, classification	The classification criteria are not met based on available data.

Symptoms of exposure

In case of ingestion	See section 4.2.
In case of skin contact	See section 4.2.
In case of inhalation	See section 4.2.
In case of eye contact	See section 4.2.

11.2 Other information

Endocrine disruption	Contains no substances with endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** > 1 - 10 mg/l **Effect dose concentration:** LC50 **Exposure time:** 96 hour(s) **Species:** Oncorhynchus mykiss **Method:** OECD Test-guideline 203
Substance	Alkyl glucoside
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** 420 mg/l **Effect dose concentration:** LC50 **Exposure time:** 96 hour(s) **Species:** Oncorhynchus mykiss **Method:** OECD Test-guideline 203 **Toxicity type:** Chronic **Value:** 1,8 mg/l **Effect dose concentration:** NOEC **Exposure time:** 28 day(s) **Species:** Brachydanio rerio **Method:** OECD Test-guideline 204
Substance	Tetrapotassium pyrophosphate
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** LC50 **Exposure time:** 96 hour(s) **Species:** Onchorhynchus mykiss **Method:** OECD Test-guideline 203
Substance	2-(2-Butoxyethoxy)ethanol
Aquatic toxicity, fish	**Toxicity type:** Acute **Value:** 1300 mg/l **Effect dose concentration:** LC50 **Exposure time:** 96 hour(s) **Species:** Leusicscus idus **Method:** OECD Test-guideline 203 **Comments:** The details of the toxic effect are related to the nominal concentration.
Substance	Potassium hydroxide
Aquatic toxicity, fish	**Value:** 80 mg/l **Effect dose concentration:** LC50 **Test duration:** 96 h **Species:** Gambusia affinis

	Method: Static test **Value:** 165 mg/l **Effect dose concentration:** LC50 **Exposure time:** 24 hour(s) **Species:** Poecilia reticulata
Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** > 1 - 10 mg/l **Effect dose concentration:** EC50 **Exposure time:** 72 hour(s) **Species:** Skeletonema costatum **Method:** Read-across (analogy)
Substance	Alkyl glucoside
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** 780 mg/l **Effect dose concentration:** ERC50 **Exposure time:** 72 hour(s) **Species:** Scenedesmus quadricauda **Method:** OECD Test-guideline 201 **Toxicity type:** Chronic **Value:** 125 mg/l **Exposure time:** 72 hour(s) **Species:** Scenedesmus subspicatus **Method:** OECD Test-guideline 201 **Comments:** NOErC
Substance	Tetrapotassium pyrophosphate
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** EC50 **Exposure time:** 72 hour(s) **Species:** Desmodesmus subspicatus **Method:** EU Method C.3 **Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** NOEC **Exposure time:** 72 hour(s) **Species:** Desmodesmus subspicatus **Method:** OECD Test-guideline 201
Substance	2-(2-Butoxyethoxy)ethanol
Aquatic toxicity, algae	**Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** EC50 **Exposure time:** 96 hour(s) **Species:** Scenedesmus quadric **Method:** OECD Test-guideline 201 **Comments:** The details of the toxic effect are related to the nominal concentration.

Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** > 1 - 10 mg/l **Effect dose concentration:** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna **Method:** Read across (analogy)
Substance	Alkyl glucoside
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** 490 mg/l **Effect dose concentration:** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna **Method:** OECD Test-guideline 202 **Toxicity type:** Chronic **Value:** 1,76 mg/l **Effect dose concentration:** EC10 **Species:** Daphnia magna **Method:** OECD Test-guideline 202 part II
Substance	Tetrapotassium pyrophosphate
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** EC50 **Exposure time:** 48 hour(s) **Species:** daphnia magna **Method:** OECD Test-guideline 202
Substance	2-(2-Butoxyethoxy)ethanol
Aquatic toxicity, crustacean	**Toxicity type:** Acute **Value:** > 100 mg/l **Effect dose concentration:** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna **Method:** (static test; Directive 67/548/EEC, Annex V, C.2.) **Comments:** The details of the toxic effect are related to the nominal concentration.
Substance	Tetrapotassium pyrophosphate
Toxicity to bacteria	**Toxicity type:** Acute **Value:** > 1000 mg/l **Effect dose concentration:** EC50 **Exposure time:** 3 hour(s) **Species:** Activated sludge **Method:** OECD Test-guideline 209
Substance	2-(2-Butoxyethoxy)ethanol
Toxicity to bacteria	**Toxicity type:** Acute **Value:** > 1995 mg/l **Effect dose concentration:** EC10 **Exposure time:** 0,5 hour(s)

	Species: Activated sludge **Method:** OECD Test-guideline 209 **Comments:** The details of the toxic effect are related to the nominal concentration.
Substance	Potassium hydroxide
Toxicity to bacteria	**Value:** 22 mg/l **Effect dose concentration:** EC50 **Exposure time:** 15 minute(s) **Species:** Photobacterium phosphoreum
Ecotoxicity	The product is not expected to be toxic to aquatic organisms.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	The product contains only readily biodegradable substances. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
Substance	C9-11 Alcohol ethoxylat
Biodegradability	**Comments:** Readily biodegradable: Method: OECD Test Guideline 301D.
Substance	2-(2-Butoxyethoxy)ethanol
Biodegradability	**Value:** 100 % **Method:** OECD Test-guideline 302B **Comments:** Readily biodegradable **Test period:** 28 day(s) **Inoculum:** aerobic; activated sludge; 500 mg/l

12.3. Bioaccumulative potential

Bioaccumulation, comments	Will not bio-accumulate.

12.4. Mobility in soil

Mobility	The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not Classified as PBT/vPvB by current EU criteria.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	The product does not contain any substances with endocrine disrupting properties.

12.7. Other adverse effects

Additional ecological information	No other harmful effects are expected.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Do not discharge into drains, watercourses, or the ground.
Appropriate methods of disposal for the contaminated packaging	Empty containers should be taken to local recycling, recovery, or waste disposal facilities.
EWC waste code	EWC waste code: 070604 other organicsolvents, washing liquids and mother liquors Classified as hazardous waste: Yes
NORSAS	7133
Other information	Dispose of in accordance with local authority requierments. The criteria for classification according to HP codes, cf. Appendix 2, Chapter 11 of the Waste Regulations (Regulations on the Recycling and Treatment of Waste), are not met.

SECTION 14: Transport information

Dangerous goods	No

14.1. UN number

Comments	Not relevant.

14.2. UN proper shipping name

Comments	Not relevant.

14.3. Transport hazard class(es)

Comments	Not relevant.

14.4. Packing group

Comments	Not relevant.

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

Special safety precautions for user	No data recorded.

14.7. Maritime transport in bulk according to IMO instruments

ADR/RID Other information

Tunnel restriction code	Not relevant.

SECTION 15: Regulatory information

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

Restriction of chemicals according to Annex XVII (REACH)	Restrictions for the following introductions should be considered: Number on the list. 3. 75
Substance	2-(2-Butoxyethoxy)ethanol
Restriction of chemicals according to Annex XVII (REACH)	Nr. 55 on list. Nr. 75 on list.
References (laws/regulations)	Norwegian regulation on classification and labeling of dangerous chemicals. Regulation on classification, labeling and packaging of substances and mixtures (CLP). Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II. Administrative norms for pollution of the atmosphere, the latest edition, from Norwegian labour inspection authority. Norwegian regulations on waste, no. 930/2004. Dangerous Goods regulations.

15.2. Chemical safety assessment

Chemical safety assessment performed	Yes
Chemical safety assessment	Measures / recommendations given under the various sections are based on assessments and implementations of information in received exposure scenarios (ES).

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation.
CLP classification, comments	Classification procedure: calculation method.
Abbreviations and acronyms used	PBT: Persistent, Bioaccumulative and Toxic. vPvB: very Persistent and very Bioaccumulative. LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.
Information added, deleted or revised	REVISIONS: ---------- 15.03.2021: Updated according to Commission Regulation (EU) 2020/878 08.11.2022: Generel revision. 31.07.2023: General revision. 01.10.2024: General revision. 08.10.2025: General revision. Relevant changes compared to the previous version of the safety data sheet are indicated with verticle lines in the left margin.
Version	6