

SAFETY DATA SHEET

LanoPro Multi Cleaner EF-101

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 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 03.10.2007

Revision date 21.05.2019



1.1. Product identifier

Product name LanoPro Multi Cleaner EF-101

Formula Formulated product.

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

Product group Cleaning/washing agent

1.3. Details of the supplier of the safety data sheet

Downstream user

Company name LanoPro Production AS

Office address Smedveien 7

Postcode 1344

City Haslum

Country Norway

Telephone number +47 40001514

Fax +47 21547343

Email mail@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

PBT / vPvB	This product is not classified as PBT or vPvB.
Health effect	Causes serious eye irritation.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents
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	Skin Corr. 1A; H314 Acute tox. 4; H302 Met. Corr. 1; H290	< 0,2 %

REACH Reg. No.:
01-2119487136-33-xxxx

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 symptomatic 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. Immediately 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.

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

Acute symptoms and effects	Inhalation: Gas or vapour may irritate respiratory 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

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.
----------------------------	--------------------------------

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.
----------	--

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)	The identified uses for this product are detailed in Section 1.2.
-----------------	---

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
2-(2-Butoxyethoxy) ethanol	CAS No.: 112-34-5	TWA (8h) : 10 ppm TWA (8h) : 68 mg/m ³ Exposure limit letter Letter code: E	TWA Year: 2015
Potassium hydroxide	CAS No.: 1310-58-3	TWA (8h) : 2 mg/m ³ , T	TWA Year: 2017
Other Information about threshold limit values	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	<p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 124 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 35,7 mg/kg/bw/day</p> <p>Group: Worker Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 420 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 357000 mg/kg/bw/day</p> <p>Group: Worker Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 595000mg/kg/bw/day</p>
PNEC	<p>Route of exposure: Sewage treatment plant STP Value: 100 mg/l</p> <p>Route of exposure: Soil Value: 0,654 mg/kg dryweight</p> <p>Route of exposure: Saltwater sediments Value: 0,072 mg/kg dryweight</p> <p>Route of exposure: Freshwater sediments Value: 0,722 mg/kg dryweight</p> <p>Route of exposure: Freshwater Value: 0,176 mg/l</p> <p>Route of exposure: Saltwater Value: 0,018 mg/l</p>
Substance	Tetrapotassium pyrophosphate
DNEL	<p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 0,68 mg/l</p> <p>Group: Industrial Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 2,79 mg/m³</p>
PNEC	<p>Route of exposure: Freshwater Value: 0,5 mg/l</p>

	<p>Route of exposure: Saltwater Value: 0,005 mg/l</p>
Substance	2-(2-Butoxyethoxy)ethanol
DNEL	<p>Group: Worker Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 10 ppm</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 10 mg/kg bodyweight/day</p> <p>Group: Worker Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 20 mg/kg bodyweight/day</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 34 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 34 mg/m³</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 1,3 mg/kg bodyweight/day</p> <p>Group: Worker Route of exposure: Short term (acute) - Inhalation - Local effect Value: 101,2 mg/m³</p> <p>Group: Worker Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 10 ppm</p>
PNEC	<p>Route of exposure: Soil Value: 0,4 mg/l</p> <p>Route of exposure: Water Value: 1 mg/l</p> <p>Route of exposure: Sewage treatment plant STP Value: 200 mg/l</p> <p>Route of exposure: Sediment Value: 4 mg/l</p>
Substance	Potassium hydroxide
DNEL	<p>Group: Professional Route of exposure: Long-term inhalation (local) Value: 1 mg/m³</p> <p>Group: Consumer Route of exposure: Long-term inhalation (local) Value: 1 mg/m³</p>

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.

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	Comments: No data available.
Flammability (solid, gas)	Not relevant.
Lower explosion limit with unit of measurement	Comments: No data available.
Upper explosion limit with units of measurement	Comments: No data available.
Vapour pressure	Comments: No data available.
Vapour density	Comments: No data available.
Relative density	Value: ~ 1000 kg/m ³
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/water	Comments: Not relevant.
Spontaneous combustability	Comments: No data available.
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.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not known.

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	In case of fire, toxic gases (CO, CO ₂ , NO _x) may be formed. Phosphorus.
----------------------------------	--

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	C9-11 Alcohol ethoxylat
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 5000 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rabbit</p>
Substance	Alkyl glucoside
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rabbit</p>
Substance	Tetrapotassium pyrophosphate
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Mouse</p> <p>Type of toxicity: Acute</p>

	<p>Effect tested: LD50 Route of exposure: Dermal Value: > 7940 mg/kg Animal test species: Rabbit</p>
Substance	2-(2-Butoxyethoxy)ethanol
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 2410 mg/kg Animal test species: Mouse Comments: OECD 401</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: 2764 mg/kg Animal test species: Rabbit Test reference: OECD 402</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Duration: 2 h Value: > 29 ppm Animal test species: Rat Test reference: OECD 403</p>
Substance	Potassium hydroxide
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 333 mg/kg Animal test species: rat</p>

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 SE, classification	The classification criteria are not met based on available data.
Assessment of specific target organ toxicity RE, 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.

SECTION 12: Ecological information

12.1. Toxicity

Substance	C9-11 Alcohol ethoxylat
Acute aquatic, fish	Value: > 1 - 10 mg/l Test duration: 96 h Species: Oncorhynchus mykiss Method: LC50 Test reference: OECD Test-retningslinje 203
Substance	Alkyl glucoside
Acute aquatic, fish	Value: > 100 mg/l Test duration: 96 h Species: Oncorhynchus mykiss Method: LC50
Substance	Tetrapotassium pyrophosphate
Acute aquatic, fish	Value: > 100 mg/l Test duration: 96 h Species: Onchorhynchus mykiss Method: LC50
Substance	2-(2-Butoxyethoxy)ethanol
Acute aquatic, fish	Value: > 100 mg/l Species: Leusiscus idus Method: LC50
Substance	Potassium hydroxide
Acute aquatic, 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

Acute aquatic, fish LCLo	
Substance	C9-11 Alcohol ethoxylat
Acute aquatic, algae	Value: > 1 - 10 mg/l Test duration: 72 h Species: Skeletonema costatum Method: EC50
Substance	Alkyl glucoside
Acute aquatic, algae	Value: > 100 mg/l Test duration: 72 h Species: Scenedesmus quadricauda Method: EC50
Substance	2-(2-Butoxyethoxy)ethanol
Acute aquatic, algae	Value: > 100 mg/l Test duration: 96 h Species: Scenedesmus quadric Method: EC50
Substance	C9-11 Alcohol ethoxylat
Acute aquatic, Daphnia	Value: > 1 - 10 mg/l Test duration: 48 h Species: Daphnia magna Method: EC50
Substance	Alkyl glucoside
Acute aquatic, Daphnia	Value: > 100 mg/l Test duration: 48 h Species: Daphnia magna Method: EC50
Substance	Tetrapotassium pyrophosphate
Acute aquatic, Daphnia	Value: > 100 mg/l Test duration: 48 h Species: daphnia magna Method: LC50 Test reference: OECD 202
Substance	2-(2-Butoxyethoxy)ethanol
Acute aquatic, Daphnia	Value: > 100 mg/l Test duration: 48 h Species: Daphnia magna Method: EC50
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, comments	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.
---	--

12.3. Bioaccumulative potential

Bioaccumulative potential	Will not bio-accumulate.
---------------------------	--------------------------

12.4. Mobility in soil

Mobility	The product is soluble in water.
----------	----------------------------------

12.5. Results of PBT and vPvB assessment

PBT assessment results	This product does not contain any PBT or vPvB substances.
------------------------	---

Substance	C9-11 Alcohol ethoxylat
-----------	-------------------------

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
------------------------	--

Substance	2-(2-Butoxyethoxy)ethanol
-----------	---------------------------

PBT assessment results	This substance is not classified as PBT or vPvB.
------------------------	--

Substance	Potassium hydroxide
-----------	---------------------

PBT assessment results	This substance is not classified as PBT or vPvB.
------------------------	--

12.6. Other adverse effects

Environmental details, summation	Not classified as dangerous to the environment.
----------------------------------	---

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.
-------------------	---

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

Additional information

Additional information	No other information noted.
------------------------	-----------------------------

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

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.
-------------------------------	--

Declaration No.	170621
-----------------	--------

15.2. Chemical safety assessment

Chemical safety assessment performed	No
--------------------------------------	----

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.
Information added, deleted or revised	REVISIONS: ----- 07.04.2016: Changes in section 3.1 and 8.2. 13.09.2016: Changes in section 8. 21.05.2019: Changes in section 2, 3, 9, 11 and 12. New classification.
Version	5