SAFETY DATA SHEET

LanoPro Turbo Cleaner EF-103

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	16.04.2020

1.1. Product identifier

Product name	LanoPro Turbo Cleaner EF-103
Formula	Formulated product.

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

Product group	Cleaning/washing agent
Use of the substance / preparation	Degreasing.

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
Downstream user	
Company name	NorKem AS
Office address	Lagerveien 12B
Postcode	4033
City	STAVANGER
Country	Norway
Telephone number	+47 51951830
Fax	+47 51951831
Email	post@norkem.no

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]	Asp. Tox. 1; H304 Eye Irrit. 2; H319 EUH 066
Substance / mixture hazardous properties	May be fatal if swallowed and enters airways. Causes serious eye irritation. Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Hazard pictograms (CLP)

Signal word	Danger
Hazard statements	H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation. EUH 066 Repeated exposure may cause skin dryness or cracking.
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. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician. P331 Do NOT induce vomiting. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice / attention.
Other label information (CLP)	Content: Hydrocarbons, C11-C14 Alcoholethoxylate 2-(2-butoxyethoxy)ethanol

2.3. Other hazards

PBT / vPvB	This product is not classified as PBT or vPvB.
Health effect	May be fatal if swallowed and enters airways. Causes serious eye irritation. Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents	Notes
Distillates (petroleum) , hydrotreated light	EC No.: 926-141-6 REACH Reg. No.: 01-2119456620-43	Asp. tox 1;H304 EUH 066	60 - 100 %	
C9-11 Alcohol ethoxylat	CAS No.: 68439-46-3	Eye Irrit. 2; H319	5 - 15 %	
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	5 - 15 %	

Substance comments	The full text for all hazard statements is displayed in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Uptake in the lungs may cause chemical pneumonia.
Inhalation	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothes and rinse skin thoroughly with water. Contact physician if irritation persists.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.
Ingestion	DO NOT induce vomiting. Get medical attention immediately. Do not give anything to eat or drink.

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

Acute symptoms and effects	Inhalation: In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Skin contact: Acts as a defatting agent on skin. May cause drying and cracking of skin Prolonged or repeated contact may cause irritation and dermatitis. Eye contact: Splashes may irritate and cause redness. Ingestion: May cause stomach pain or vomiting. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

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	Dry powder, Alcohol-resistant foam, Carbon dioxide (CO2), Water spray.

Improper extinguishing media	Water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The Product is non-combustible.
Hazardous combustion products	Hazardous combustion Products may contain carbon monoxide gas.

5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection.
Other information	Flame exposed containers is cooled with water. If possible without any risk, remove container from fireplace.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Do not breathe vapour. Avoid contact with skin and eyes. Stop leak if possible without any risk. Wear protective clothing 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.

6.3. Methods and material for containment and cleaning up

Clean up	Absorb in vermiculite, dry sand or earth and place into containers. For waste disposal, see section 13.

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	Avoid temperatures over 68 °C. The vapours may form explosive mixtures with air.

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. Avoid eating, drinking and smoking when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a well-ventilated place. Keep container tightly closed. Protect from heat and direct sunlight. Do not expose to temperatures exceeding 68 °C.

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	Exposure limits	TWA Year
Distillates (petroleum) , hydrotreated light		Limit value (8 h) : 40 ppm Limit value (8 h) : 275 mg/m3	TWA Year: 2013
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	TWA Year: 2015

Other Information about threshold limit values	The values listed applies to Norway. Explanation of the notations: E = The substance has an EU workplace exposure limit References (laws/regulations): Norwegian regulation on exposure limits: "FOR-2011-12-06-1358.

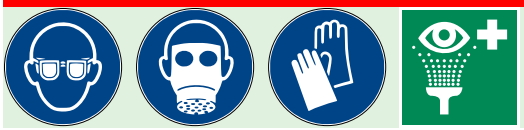
DNEL / PNEC

Substance	2-(2-Butoxyethoxy)ethanol
DNEL	**Group:** Worker **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:** Worker **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:** Worker **Route of exposure:** Short term (acute) - Inhalation - Local effect **Value:** 101,2 mg/m3 **Group:** Worker **Route of exposure:** Long term (repeated) - Inhalation - Local effect

	Value: 10 ppm
PNEC	**Route of exposure:** Soil **Value:** 0,4 mg/l **Route of exposure:** Water **Value:** 1 mg/l **Route of exposure:** Sewage treatment plant STP **Value:** 200 mg/l **Route of exposure:** Sediment **Value:** 4 mg/l

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. 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 : 0,5 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

Respiratory protection

Recommended type of equipment	Use respiratory equipment with combination filter, type A2/P3. In case of inadequate ventilation, use air-supplied full-mask. 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	Fluid.
Colour	Colourless.
Odour	Hydrocarbon. Petroleum.
Odour limit	Comments: No data available.
pH	Comments: Not relevant.
Melting point / melting range	Value: -40 °C
Boiling point / boiling range	Value: 200 - 250 °C
Flash point	Value: ~ 80 °C
Evaporation rate	Comments: No data available.
Flammability (solid, gas)	Not relevant.
Lower explosion limit with unit of measurement	Value: 1 %
Upper explosion limit with units of measurement	Value: 6 %
Vapour pressure	Value: ~ 0,06 kPa (20 °C)
Vapour density	Comments: No data available.
Density	Value: ~ 800 kg/m³ Temperature: 15 °C
Solubility	Comments: Not soluble in water.
Partition coefficient: n-octanol/ water	Value: 3 - 6 Method: LogPow
Spontaneous combustability	Value: 240 °C
Decomposition temperature	Comments: No data available.
Viscosity	Value: 1.97 Comments: mm2/s (25 °C)
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	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No recommendation given.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid	Strong oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products	Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Comments: LD50 Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Comments: LD50 Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Value: > 5000 mg/kg Comments: LD50
Substance	Distillates (petroleum), hydrotreated light
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:** > 5000 mg/kg **Animal test species:** Rabbit **Type of toxicity:** Acute

	Effect tested: LC50 **Route of exposure:** Inhalation. **Value:** > 5000 mg/l **Animal test species:** Rat
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	2-(2-Butoxyethoxy)ethanol
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** > 2000 mg/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 2410 mg/kg **Animal test species:** Mouse **Comments:** OECD 401 **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** 2764 mg/kg **Animal test species:** Rabbit **Test reference:** OECD 402 **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

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	Acts as a defatting agent on skin. May cause cracking of skin.

Assessment of eye damage or irritation, classification	Causes serious 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	May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Distillates (petroleum), hydrotreated light
Aquatic toxicity, fish	**Value:** > 1000 mg/l **Test duration:** 96 h **Species:** Onchorhynchus mykiss **Method:** LC50 **Test reference:** OECD 203
Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, fish	**Value:** > 1 - 10 mg/l **Test duration:** 96 h **Species:** Oncorhynchus mykiss **Method:** LC50 **Test reference:** OECD Test-retningslinje 203
Substance	2-(2-Butoxyethoxy)ethanol
Aquatic toxicity, fish	**Value:** > 100 mg/l **Species:** Leusicscus idus **Method:** LC50
Acute aquatic, fish LCLo	
Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, algae	**Value:** > 1 - 10 mg/l **Test duration:** 72 h **Species:** Skeletonema costatum **Method:** EC50
Substance	2-(2-Butoxyethoxy)ethanol

Aquatic toxicity, algae	**Value:** > 100 mg/l **Test duration:** 96 h **Species:** Scenedesmus quadric **Method:** EC50
Aquatic toxicity, crustacean	Comments: Not known.
Substance	C9-11 Alcohol ethoxylat
Aquatic toxicity, crustacean	**Value:** > 1 - 10 mg/l **Test duration:** 48 h **Species:** Daphnia magna **Method:** EC50
Substance	2-(2-Butoxyethoxy)ethanol
Aquatic toxicity, crustacean	**Value:** > 100 mg/l **Test duration:** 48 h **Species:** Daphnia magna **Method:** EC50

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	Bioaccumulation: Is not expected to be bioaccumulable.

12.4. Mobility in soil

Mobility	The product is insoluble in water and will spread on the water surface. Evaporates quickly into the atmosphere. Absorbs to ground.

12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
Substance	Distillates (petroleum), hydrotreated light
PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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.

12.6. Other adverse effects

Environmental details, summation	The product is evaluated to biodegradable. Only larger spills may cause risk in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Collect in marked containers and deliver to approved depot.
EWC waste code	EWC waste code: 070104 other organicsolvents, washing liquids and mother liquors Classified as hazardous waste: Yes
Other information	Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

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
Comments	Not relevant.

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

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

Additional information

Additional information	No other information noted.

SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No. 648/2004 on detergents. 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)	EUH 066 Repeated exposure may cause skin dryness or cracking. H304 May be fatal if swallowed and enters airways. 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: ---------- 28.05.2019: General update.
Version	1