

SERRES NEMO - safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

KiiltoClean Oy - Erizyme
8157,8137,8158,3101412, 3101412

Washing tray 5798503 / 570985

Pesukansi 57985

Diskplatta 5798504

Vaskebakke 5798504

Vaskelokk 5798502

Cartuccia di lavaggio 5798501

Bandeja de lavado 5798505

Reinigungstablett 5798506

Cartouche de nettoyage 5798508

Waslade 5798508

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE
AND OF THE COMPANY/UNDERTAKING****1.1 Producent identifier**

Trade name / substance name:

KiiltoClean Oy - Erizyme - 8157,8137,8158,3101412, 3101412

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

Relevant identified uses: Detergent. For professional user only.

Uses advised against (Professional user): Not defined

1.3 Details of the supplier of the safety data sheet

KiiltoClean Oy

Tengströminkatu 6

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www.kiiltoclean.fi

1.4 Emergency telephone number

Poison advisory center in Finland: +358 9 471 977

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

CLP Regulation (EC) n^o 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n^o 1272/2008.

Eye Dam. 1: Serious eye damage, Category 1, H318

Skin Irrit. 2: Skin irritation, Category 2, H315

2.2 Label elements

CLP Regulation (EC) n^o 1272/2008:



DANGER

Hazard statements

H318 Causes serious eye damage.

H315 Causes skin irritation.

Precautionary statement on prevention

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/eye protection.

Precautionary statement on emergency measures

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.

2.3 Other hazards

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Non-applicable

3.2 Mixture:

Chemical description: Aqueous solution of tensoactives

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

Identification	Chemical name / Classification		Concentration
CAS: 54549-24-5 EC: 259-217-6 Index: Non-applicable REACH: 01-2119492545-29-XXXX	Alkyl glucoside Self-classified		1 - <5 %
	Regulation 1272/2008	Eye Dam. 1: H318 - Danger	
CAS: 68439-46-3 EC: 614-482-0 Index: Non-applicable REACH: Non-applicable	C9-C11 fatty alcohol ethoxylate Self-classified		1 - <5 %
	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	
CAS: 120313-48-6 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	Fatty alcohol alkoxyate Self-classified		1 - <2,5 %
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Skin Irrit. 2: H315 - Warning	

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention in case of direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation: This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication, remove the person affected away from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact: Remove contaminated clothing and footwear, rinse skin or shower the person affected with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact: Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration: Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed

Acute and delayed effects are indicated in sections 2 and 11

4.3 Indication of any immediate medical attention and special treatment needed

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

The product is non-flammable under normal conditions of storage, handling and use. In case of fire as a result of improper manipulation, storage, preferably use polyvalent powder extinguishers (ABC powder). IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions

Avoid release to the environment. Contain the product absorbed in hermetically sealed containers. In the case of serious release to the environment, notify the relevant authority.

6.3 Methods and material for containment and cleaning up It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a container for disposal. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal, consult section 13.

6.4 Reference to other sections

See Sections 8 and 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks
It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities

Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 25 °C

General conditions for storage:

Avoid sources of heat, radiation, static electricity and contact with food.

For additional information see subsection 10.5

7.3 Specific end use(s)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Substances whose occupational exposure limits have to be monitored in the work environment. There are no occupational exposure limits for the substances contained in the product.

DNEL (Workers)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	Oral Dermal Inhalation	Non-applicable Non-applicable Non-applicable	Non-applicable Non-applicable Non-applicable	Non-applicable 595000 mg/kg 420 mg/m ³	Non-applicable Non-applicable Non-applicable

DNEL (General population)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	Oral Dermal Inhalation	Non-applicable Non-applicable Non-applicable	Non-applicable Non-applicable Non-applicable	35,7 mg/kg 357000 mg/kg 124 mg/m ³	Non-applicable Non-applicable Non-applicable

PNEC

Identification				
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	STP Soil intermittent Oral	100 mg/L 0,654 mg/kg 4,2 mg/L 111,11 g/kg	Fresh water Marine water Sediment (Fresh water) Sediment (Marine water)	0,1 mg/L 0,01 mg/L 0,41 mg/kg 0,041 g/kg

8.2 Exposure controls

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 <p>Mandatory hand protection</p>	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 <p>Mandatory face protection</p>	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

Bodily protection

Non-applicable

Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 <p>Emergency shower</p>	ANSI Z358-1 ISO 3864-1:2002	 <p>Eyewash stations</p>	DIN 12 899 ISO 3864-1:2002

Protective gloves complying with EN374:PVC,natural rubber

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state at 20 °C liquid

Appearance Fluid

Colour Yellowish

Odour Undefined

Odour threshold Non-applicable *

Volatility:

Boiling point at atmospheric pressure Non-applicable *

Vapour pressure at 20 °C Non-applicable *

Vapour pressure at 50 °C Non-applicable *

Evaporation rate at 20 °C Non-applicable *

Product description:

Density at 20 °C 1098 kg/m³

Relative density at 20 °C Non-applicable *

Dynamic viscosity at 20 °C Non-applicable *

Kinematic viscosity at 20 °C Non-applicable *

Kinematic viscosity at 40 °C Non-applicable *

Concentration Non-applicable *

pH 7,5

Vapour density at 20 °C Non-applicable *

Partition coefficient n-octanol/water 20 °C Non-applicable *

Solubility in water at 20 °C Non-applicable *

Solubility properties Water miscible

Decomposition temperature Non-applicable *

Melting point/freezing point Non-applicable *

Explosive properties Non-applicable *

Oxidising properties Non-applicable *

Flammability

Flash Point Non Flammable (>60 °C)

Flammability (solid, gas) Non-applicable *

Autoignition temperature Non-applicable *

Lower flammability limit Non-applicable *

Upper flammability limit Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

9.2 Other information

No other information

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability

Chemically stable under appropriate conditions of storage, handling and use.

10.3 Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid

No particular conditions to avoid. Provide adequate ventilation upon storage and handling.

10.5 Incompatible materials

Oxidising agents.

Avoid strong acids, alkalis or strong bases.

10.6 Hazardous decomposition products

Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect)

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

For more information see section 3.

Other information

Non-applicable

Specific toxicology information on the substances

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity

The product is not classified as toxic to the environment. Experimental information related to the eco-toxicological properties of the product itself is not available.

Identification	Acute toxicity		Species	Genus
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	LC50 EC50 EC50	420 mg/L (96 h) 490 mg/L (48 h) 780 mg/L (72 h)	Oncorhynchus mykiss Daphnia magna Scenedesmus subspicatus	Fish Crustacean Algae
Fatty alcohol alkoxyate CAS: 120313-48-6 EC: Non-applicable	LC50 EC50 EC50	0.1 - 1 mg/L (96 h) 0.1 - 1 mg/L 0.1 - 1 mg/L		Fish Crustacean Algae

12.2 Persistence and degradability

Identification	Degradability		Degradability	
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	B05D COD B05D/COD	Non-applicable Non-applicable Non-applicable	Concentration Period % Biodegradable	2 mg/L 28 days 71 %

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Identification	Absorption/desorption		Volatility	
Alkyl glucoside CAS: 54549-24-5 EC: 259-217-6	Koc Conclusion Surface tension	8 Very High Non-applicable	Henry Dry soil Moist soil	7E-9 Pa·m ³ /mol No No

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

Not described.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Code** 20 01 30**Description** Detergents other than those mentioned in 20 01 29**Waste class (Regulation (EU) No 1357/2011)** Non dangerous**Type of waste (Regulation (EU) No 1357/2014)** Non-applicable**Waste management (disposal and evaluation)**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated. Community legislation:

Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List")

and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Regulation (EC) nº648/2004 on detergents

In accordance with this regulation the product complies with the following: The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) nº648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

Other information

Contains subtilisin < 0,1 %. The product is a medical device according to the Directive 93/42/EEC.

15.2 Chemical safety assessment

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.

Non-applicable

Texts of the legislative phrases mentioned in section 2

H315: Causes skin irritation

H318: Causes serious eye damage

Texts of the legislative phrases mentioned in section 3

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) n° 1272/2008

Aquatic Acute 1: H400 - Very toxic to aquatic life

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects

Eye Dam. 1: H318 - Causes serious eye damage

Eye Irrit. 2: H319 - Causes serious eye irritation

Skin Irrit. 2: H315 - Causes skin irritation

Advice related to training

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources

<http://esis.jrc.ec.europa.eu>

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol–water partition coefficient

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.