

SAFETY DATA SHEET

SLES 27

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

Date of issue : 2010-07-15
Date of revision : 2022-07-29
Version : 7

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

1.1. Product identifier

Product name : SLES 27
Chemical name : Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts. Aqueous solution
EC number : Mixture
Other means of identification : Substance: Sodium laureth sulphate, Sól sodowa siarczanowanego, etoksylowanego alkoholu laurylowego C12-14, CAS: 68585-34-2

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

Identified uses : Anionic surfactants Base for detergent formulations. Manufacture of cosmetics.
Uses advised against : Not determined.

1.3. Details of the supplier of the safety data sheet

Name : GLI-THERM Sp. z o.o.
Address : st. Rozwojowa 11, 44-338 Jastrzębie-Zdrój Poland
Regon : 242850136
NIP/Tax No : 6423178990
Telephone : +48 733 525 533
E-mail : sandra.stachowicz@gli-therm.eu
Website address : www.glitherm.eu

1.4. Emergency telephone number

National advisory body/Poison Center:

Ireland : National Poisons Information Centre
Emergency number:
+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166
(public, 8am - 10pm, 7/7)

United Kingdom : National Poisons Information Service (Newcastle Centre)
Emergency number:
0844 892 0111 (UK only, 24/7, healthcare professionals only)

Poland : Szpital Praski p.w. Przemienienia Pańskiego Sp. z o.o.
Emergency number:
+48 22 619 66 54
+48 22 619 08 97

Germany : Vergiftungs-Informationen-Zentrale Freiburg
Emergency number: +49 (0) 761 19240

24 Hour Emergency Telephone : +(44)-8708200418 CHEMTREC

Supplier

Telephone number : +48 733 525 533

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit. 2, H315

Eye Dam. 1, H318

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2. Label elements

Hazard pictograms :



Signal word : DANGER

Hazard statements : **H315** - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention	:	P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response	:	P310 - Immediately call a POISON CENTER or doctor. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	:	Not applicable.
Disposal	:	P501 - Dispose of contents/container to hazardous or special waste collection point.
Hazardous ingredients	:	Alcohols, C12-14, ethoxylated, sulfates, sodium salts
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.

2.3. Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT at a concentration $\geq 0.1\%$ (w/w).
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a vPvB at a concentration $\geq 0.1\%$ (w/w).
Other hazards which do not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2. Mixture

Substance	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
water	REACH #: Annex IV EC: 231-791-2 CAS: 7732-18-5	65.5 - 73.5	Not classified.	[2]
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	REACH #: 01-2119488639-16 EC: 500-234-8 CAS: 68891-38-3	26.5 - 34.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. Specific Conc. Limits, M-factors and ATEs Eye Dam. 1, H318: C ≥ 10% Eye Irrit. 2, H319: 5% ≤ C < 10%	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type:

[1] Substance classified with a health or environmental hazard

[2] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Put on appropriate personal protective equipment (see Section 8).

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

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).
- Unsuitable extinguishing media** : Never direct a water jet into the container in order to prevent any splashing of the product, which could cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : CO₂, CO sulfur oxides

5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3. Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Do not absorb in sawdust or other combustible material.

6.4. Reference to other sections

See Section 1 for emergency contact information.

See Section 7 for information on safe handling.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1. Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities.

Store between the following temperatures: 15 to 45°C (59 to 113°F). Store in accordance with local regulations. Shelf life: 12 months from the date of manufacture. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3. Specific end use(s)

- Recommendations** : None.
- Industrial sector specific solutions** : Exposure scenarios for substances in this mixture are available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance.

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1. Control parameters

Occupational exposure limits.

No exposure limit value known.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	TYPE	Exposure	Value	Population	Effects
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	DNEL	Long term Oral	15 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	52 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	530 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	1650 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2750 mg/kg bw/day	Workers	Systemic

- DNEL/DMEL Summary** : Data refer to pure substance. REACH

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	Fresh water	0.24 mg/l	Assessment Factors
	Marine water	0.024 mg/l	Assessment Factors
	Fresh water sediment	0.9168 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	10 000 mg/l	Assessment Factors
	Marine water sediment	0.0917 mg/kg dwt	Equilibrium Partitioning
	Soil	7.5 mg/kg dwt	Assessment Factors

PNEC Summary : Data refer to lead substance. REACH

8.2. Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
In case of a long-term direct exposure, butyl rubber >0.7 mm thick, of minimum time of penetration 480 min should be used.
In case of a short-term direct exposure nitrile rubber/ nitrile latex >0.4 mm thick, of minimum time of penetration 30 min should be used.

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Suitable protective footwear.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Possible: Under normal conditions of storage does not emit hazardous fumes.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Color	: Colorless.
Odor	: Characteristic.
pH	: 10 to 11,4 [Conc. (% w/w): 10%]
Initial boiling point and boiling range	: >100°C (>212°F)
Melting point/freezing point	: 0°C approx.
Flash point	: Lack of data.
Evaporation rate	: Lack of data.
Flammability (solid, gas)	: Lack of data.
Upper/lower flammability or explosive limits	: Lack of data.
Vapor pressure	: Lack of data.
Vapor density	: Lack of data.
Density	: 1,04 g/cm ³
Relative density	: Lack of data.
Solubility(ies)	: methanol Easily soluble
Solubility in cold water	: Easily soluble
Partition coefficient:	: Lack of data.

n-octanol/water	
Auto-ignition temperature	: Lack of data.
Ingredient name	: Alcohols, C12-14, ethoxylated, sulfates, sodium salts 250°C 482°F EU A.16
Decomposition temperature	: >50°C
Viscosity	: Dynamic: 100 mPa·s approx.

9.2. Other information

Explosive properties	: Lack of data.
Oxidizing properties	: No results available.
Median particle size	: Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Shelf life: 12 months from the date of manufacture.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Stable under recommended storage and handling conditions (see Section 7).

10.5. Incompatible materials

Strong oxidizer, copper

10.6. Hazardous decomposition products

sulfur oxides; carbon oxides (CO, CO₂)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

Oral	: LD50 2870 mg/kg (Rat male, female)
Skin	: LD50 >2000 mg/kg (Rat male, female)
Conclusion/Summary	: No known significant effects or critical hazards. Data has not been precisely determined for this product. The information provided is compiled based on the data of similar substances or components.

Acute toxicity estimates:

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts. Aqueous solution	>8319	>2000	Lack of data.	Lack of data.	Lack of data.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	Skin - Irritant	Rabbit	-	-	-
	Eyes - Severe irritant	Rabbit	-	-	-

Conclusion/Summary

- Skin** : Causes skin irritation.
Calculation method
- Eye** : Risk of serious damage to eyes.
Calculation method
- Respiratory** : No known significant effects or critical hazards. Toxicity data:
Composition/information on ingredients

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	skin	Guinea pig	Not sensitizing

Conclusion/Summary

- Skin** : Non-sensitizer to skin. Based on available data, the classification criteria are not met.
Toxicity data: Composition/information on ingredients
- Respiratory** : No known significant effects or critical hazards. Based on available data, the classification criteria are not met.
Toxicity data: Composition/information on ingredients

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: S. typhimurium TA 1535, TA 1537, TA 1538, TA 98, TA 100	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 475 Mammalian Bone Marrow Chromosomal Aberration Test	Experiment: In vivo Subject: Mammalian-Animal	Negative

Conclusion/Summary : No mutagenic effect.

Carcinogenicity

Conclusion/Summary : No carcinogenic effect.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	Negative	Negative	Negative	Rat male	Oral: 30-300 mg/kg	11 weeks

Conclusion/Summary : Not mutagenic in a standard battery of genetic toxicological tests.

Teratogenicity : No known significant effects or critical hazards.

Specific target organ toxicity - single exposure : No known significant effects or critical hazards.

Specific target organ toxicity - repeated exposure : No known significant effects or critical hazards.

Aspiration hazard : No known significant effects or critical hazards.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal. Eyes.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain, watering, redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur

Ingestion : Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Causes skin irritation. Eye irritation

Potential delayed effects : Eye irritation Skin irritation

Long term exposure

Potential immediate effects : Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Potential delayed effects : Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	Sub-chronic NOAEL Oral	Rat - Male, Female	>225 mg/kg	90 days

Conclusion/Summary : No known significant effects or critical hazards. Toxicity data: Composition/information on ingredients

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties : No known significant effects or critical hazards.

Other information : No additional information.

SECTION 12: Ecological information

12.1. Toxicity

Product/ingredient name	Result	Species	Exposure
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	Acute EC50 27,7 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 7,4 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 7,1 mg/l Fresh water	Fish - Danio rerio	96 hours
	Chronic NOEC 0,18 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0,1 mg/l Fresh water	Fish - Oncorhynchus mykiss	28 days
	Chronic NOEC 1 mg/l Fresh water	Fish - Pimephales promelas	45 days

Conclusion/Summary : Harmful to aquatic life with long lasting effects. Calculation method

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	EU EEC nr C.4-D/OECD301F	>68 % - Readily - 28 days	-	-

Conclusion/Summary : This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Biodegradation data source has not been precisely determined for this product. The information provided is compiled based on the data of components.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Alcohols, C12-14, ethoxylated (<2.5EO), sulfates, sodium salts	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
water	-1,38	-	low
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	0,3	<500	low

12.4 Mobility in soil

- Soil/water partition coefficient (KOC)** : Lack of data.
- Mobility** : Water-soluble liquid

12.5 Results of PBT and vPvB assessment

- PBT** : This mixture does not contain any substances that are assessed to be a PBT at a concentration $\geq 0.1\%$ (w/w).
- vPvB** : This mixture does not contain any substances that are assessed to be a vPvB at a concentration $\geq 0.1\%$ (w/w).

12.6 Endocrine disrupting properties

No known significant effects or critical hazards.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

- Hazardous waste** : Yes.

European waste catalogue (EWC)

- | Waste code | : | Waste designation |
|------------|---|--|
| 16 03 05* | : | organic wastes containing hazardous substances |

Packaging

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Can	: 15 01 10* - packaging containing residues of or contaminated by hazardous substances
Barel	: 15 01 10* - packaging containing residues of or contaminated by hazardous substances
Container	: 15 01 10* - packaging containing residues of or contaminated by hazardous substances
Can	: 15 01 10* - packaging containing residues of or contaminated by hazardous substances
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1. UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2. UN Proper Shipping Name	-	-	-	-
14.3. Transport Hazard Class(es)	-	-	-	-
14.4. Packing Group	-	-	-	-
14.5. Environmental Hazards	-	-	-	-

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments.

Not regulated.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

DIRECTIVE 2008/68/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 September 2008 on the inland transport of dangerous goods (ADR, ADN, RID)

IATA /International Air Transport Association/ Dangerous Goods Regulations (ICAO/IATA DGR)
International Maritime Dangerous Goods Code (IMDG CODE)

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

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants (2019/1021/UE)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

15.2 Chemical Safety Assessment:

Substance Exposure Scenario available

SECTION 16: Other information

The data is confirmed based on the state of our knowledge, but does not determine how the production properties and cannot be used to justify legally binding contracts.

Abbreviations; acronyms and full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H290	:	May be corrosive to metals.
H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H312	:	Harmful in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H331	:	Toxic if inhaled.

H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H341	:	Suspected of causing genetic defects.
H350i	:	May cause cancer by inhalation.
H360D	:	May damage the unborn child.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.
Eye Irrit. 2, H319	:	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Aquatic Chronic 3, H412	:	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1, H318	:	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Skin Irrit. 2, H315	:	SKIN CORROSION/IRRITATION - Category 2
NDS	:	The highest acceptable concentration
NDSC_h	:	Highest Permissible Temporary Concentration
NDSP	:	Maximum Allowable Ceiling Concentration
REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemical
MARPOL	:	(from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships
N/A	:	Not applicable
N/D	:	Not determined
NE	:	Not established
VOC	:	Volatile Organic Compound
AICS	:	Australian Inventory of Chemical Substances
AIHA WEEL	:	American Industrial Hygiene Association Workplace Environmental Exposure Limits
DSL	:	Domestic Substance List (Canada)
ELINCS	:	European List of Notified Chemical Substances
ENCs	:	Existing and new Chemical Substances (Japanese inventory)
IECSC	:	Inventory of Existing Chemical Substances in China
KECI	:	Korean Existing Chemicals Inventory
NDSL	:	Non-Domestic Substances List (Canada)
NZIoC	:	New Zealand Inventory of Chemicals
PICCS	:	Philippine Inventory of Chemicals and Chemical Substances
TLV	:	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TSCA	:	Toxic Substances Control Act (U.S. inventory)
UVCB	:	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
IBC Code	:	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
UN	:	United Nations (also UNO: United Nations Organization)
NOEC	:	No Observed Effect Concentration
NOELR	:	No Observable Effect Loading Rate

OECD	:	Organization for Economic Co-operation and Development
ASTM	:	American Society for Testing and Materials
WAF	:	Water Accommodated Fraction
ADR	:	Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG	:	International Maritime Code for Dangerous Goods
IATA	:	International Air Transport Association
GHS	:	Globally Harmonised System of Classification and Labeling of Chemicals
EINECS	:	European Inventory of Existing Commercial Chemical Substances
CAS	:	Chemical Abstracts Service (division of the American Chemical Society)
DNEL	:	Derived No-Effect Level (REACH)
PNEC	:	Predicted No-Effect Concentration (REACH)
LC	:	Lethal Concentration
LD	:	Lethal Dose
LL	:	Lethal Loading
EC	:	Effective Concentration
EL	:	Effective Loading
LC50	:	Lethal concentration, 50 percent
LD50	:	Lethal dose, 50 percent
EC50	:	The concentration of the test substance that causes 50% change in response (e.g. to growth) over a specified time period
PBT	:	Persistent, Bioaccumulative and Toxic
vPvB	:	very Persistent and very Bioaccumulative
Acute Tox, 4	:	Acute toxicity - Category 4
Notice to reader	:	The information contained herein is accurate to the latest knowledge and describes the product from the point of view of health and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"