

**Sodium Lauryl Ether Sulfate 27%**

REVISION DATE: 09/15/2022

1. -PRODUCT AND COMPANY IDENTIFICATION**Product name:** Sodium Lauryl Ether Sulfate 27%**Internal Code of product identification:****Company name:** USIQUÍMICA DO BRASIL LTDA.**Address:** Rua da Lagoa, 431 - Cumbica - Guarulhos - SP.**Company Phone:** + 5511 3821-7000 (PBX system) - + 5511 2481-3355.**Emergency phone:** SUATRANS - COTEC - Environmental Emergency.

DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.

193 – Firefighters.


Main recommended uses for the substance: Industry.**2. - HAZARD IDENTIFICATION****Classification of Substance:**

Corrosive/Irritating to the skin - Category 2

Serious eye damage / eye irritation - Category 2

Dangerous to the aquatic environment - Acute Toxicity- Category 3

Adverse effects on human health:**Eye contact:** Causes irritation.**Ingestion:** Irritating to the digestive tract, can cause severe damage.**Inhalation:** Irritating.**Skin contact:** Irritating.**Environmental effects:** Dangerous for the aquatic environment.**Specific hazards:** Causes eye and skin irritation. Possible respiratory tract irritation.**GHS label elements, including precautionary phrases:**

LABEL ELEMENTS	DATA
Product identification and supplier emergency telephone number.	Commercial Name: Sodium Lauryl Ether Sulfate 27% Emergency phone: SUATRANS - COTEC - Environmental Emergency. DDG (0800) 0111-767 - (0800) 7071-767 - 24 HOURS.
Hazard pictograms.	
Warning words.	ATTENTION
Danger phrases.	H320 - Causes eye irritation.
Precautionary phrases.	P280 - Use protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IN CASE OF SKIN CONTACT (or with the hair): Remove immediately all contaminated clothing. Wash the skin with water/take a shower. P304+P340+P310 IN CASE OF INHALATION: Remove the person to a ventilated area and keep the person in a rest position that does not make it difficult to breathe. Immediately contact a TOXICOLOGICAL INFORMATION CENTER or a physician. P305+P351+P338+P310 IN CASE OF EYE CONTACT: Rinse thoroughly with water for several minutes. If contact lenses are used, remove them if it is easy. Continue rinsing. Immediately contact a

**Sodium Lauryl Ether Sulfate 27%**

REVISION DATE: 09/15/2022

	TOXICOLOGY INFORMATION CENTER or physician. P308 + P311 IN CASE OF exposure or suspected exposure: Contact a TOXICOLOGICAL INFORMATION CENTER/doctor.
--	--

Other hazards which do not result in classification: No information found.

3. - COMPOSITION AND INFORMATION ON THE INGREDIENTS

Substance: Sodium Lauryl Ether Sulfate

Common chemical name or generic name: Sodium Lauryl Ether Sulfate 70%

Chemical Abstract Service (CAS No.): 9004-82-4

Concentration: 27%

Impurities that contribute to the danger: Not applicable.

4. - FIRST AID MEASURES

First aid measures:

Inhalation: Remove casualty to uncontaminated, ventilated area. If breathing is difficult, give oxygen. Apply resuscitation maneuvers in case of cardiorespiratory arrest. Immediately forward to the nearest hospital.

Skin contact: Remove clothing contaminated by the product. Wash contact areas with plenty of water. If irritation persists, seek medical attention.

Eye contact: Immediately wash eyes with running water for 15 minutes, lifting eyelids to allow maximum removal of product. seek medical attention.

Ingestion: If a large amount of this substance is ingested, refer immediately to a doctor. Do not induce vomiting.

What actions must be avoided: Do not induce vomiting. If vomiting occurs spontaneously, the victim must be laid on their side to prevent pulmonary aspiration. Never administer liquids to unconscious victims.

Brief description of the main symptoms and effects: May cause irritation to eyes and skin. Possible respiratory tract irritation.

Notes to the physician: Avoid contact with the product to help the victim. Keep victim at rest and warm. Do not give anything by mouth to an unconscious person. The symptomatic treatment must include, above all, supportive measures such as correction of hydroelectrolytic, metabolic disorders, as well as respiratory assistance. In case of contact with the skin and/or eyes, do not rub the affected parts.

5. - FIREFIGHTING MEASURES

Suitable extinguishing measures: The product is not flammable. In case of fire, use CO2 extinguisher, dry chemical, foam or water.

Inappropriate extinguishing measures: Waterjet.

Other relevant information: The product is difficult to burn, but it can burn or decompose if it is involved in flames from other products. Proceed as indicated for the other products involved in the fire.

Specific hazards: Release of harmful or toxic vapors.

Additional indications: The hazard depends on the burning products and the fire conditions. Contaminated fire-fighting water must be disposed of in accordance with official local regulations.

Fire fighter Protection: Special protective equipment for personnel assigned to fight fires. Do not stay in the danger zone without self-contained breathing apparatus suitable for breathing independently of the environment. To avoid skin contact, maintain a safe distance and wear suitable protective clothing. Refresh closed containers exposed to fire with water spray. Suppress (shoot down) with water jets (fog) gases, vapors and mists. Avoiding contamination of surface water and groundwater with fire fighting water.

**Sodium Lauryl Ether Sulfate 27%**

REVISION DATE: 09/15/2022

6. - CONTROL MEASURES FOR SPILLING OR LEAKING**Personal precautions, protective equipment and emergency procedures:**

Personnel who are not part of the emergency services: Do not breathe vapors or aerosols. Avoiding contact with the substance. Ensuring adequate ventilation. Evacuating the danger area, observe emergency procedures. If necessary, consult an expert.

For the staff of the emergency department: Use complete PPE, with protective PVC gloves, safety glasses with side protection and suitable protective clothing. The material used must be waterproof. In case of large leaks, where exposure is great, it is recommended to use a protective mask with a filter against vapors or mists. Spilled product that gets wet or spills from aqueous solutions creates a hazardous condition due to its slippery nature. Avoid generation of dust.

Removal of ignition sources: Keep away from sources of heat and ignition.

Prevention of inhalation and contact with skin, mucous membranes and eyes: See Section 8, Field:

“ Appropriate Personal Protective Equipment”.

Precautions to the environment: Prevent spilled product from entering water courses. Collect the spilled product, place the material in appropriate containers for proper final destination.

Methods and materials for containment and cleaning: Use water mist or vapor suppressing foam to reduce vapor dispersion. Use natural or spill containment barriers. Collect spilled product and place in proper containers.

Disposal: Waste must be disposed of in accordance with current Environmental Legislation. Keep chemicals in their original containers. Do not mix with other waste. Handling dirty containers must be carried out in the same way as the product itself. An MSDS of the waste must be generated.

Differences in the action of large and small leaks: For small quantities it can be an inert absorbent material; large quantities must be backfilled with earth, sand or other inert material. The product must be collected in suitable containers, properly identified, for later disposal. Washing the area with plenty of water, which must also be collected for disposal. Collecting contaminated soil.

7. - HANDLING AND STORAGE**Handling:**

Technical measures Using only in areas provided with adequate exhaust ventilation. Providing the product handling area with a set of emergency shower and eye wash. Handling must only be done with the indicated PPE and under safe conditions.

Prevention of worker's exposure: Avoiding the formation of vapors/aerosols. Working with exhaust / chimney. Do not inhale the substance/mixture. Using specific PPE's - splash goggles, face shield, PVC gloves and protective clothing. Avoid inhaling vapors.

Wash after handling and decontaminate PPE's after use. PPE's must be approved for use only with the respective CAS – Certificates of Approval.

Precautions and guidelines for safe handling: Use personal protective equipment (PPE) to avoid direct contact with the product. Handling the product in a well-ventilated place. Forms a slippery layer with water.

Storage:

Appropriate: Keep container tightly closed in a dry, cool and well-ventilated area. Keep in a cool, dry place in unopened original packaging. Avoid damp, wet and lightly wet conditions, temperature extremes and sources of ignition.

To avoid: Avoid extreme heat.

Hygiene measures:

Appropriate: Always sanitize your hands before handling any food, as there is a risk of food contamination. Contaminated clothing must be washed and sanitized before use. Always keep gloves free from moisture and decontaminated.

Inappropriate: Direct contact with the product and/or its residues.

Technical measures

Suitable conditions: Keep containers closed and in a well-ventilated place. Keep containers away from heat and direct sunlight. Avoid extreme temperatures. Avoid moisture.

Sensitive to freezing. If the product becomes frozen, cloudy or dense due to the cold, it must be thawed

**Sodium Lauryl Sulfate 27%**

REVISION DATE: 09/15/2022

slowly at a mild temperature (not more than 40°C).

Safe materials for packaging:

Recommendations: Stainless steel, carbon steel coated with vinyl ester resin, polyester resin reinforced with fiberglass, plastic materials (polyethylene).

Not suitable: Aluminum and zinc and their alloys.

Further information: Protect from extreme cold, heat and sunlight.

8. - EXPOSURE CONTROLS AND PERSONAL PROTECTION**Parameters of specific control:****Occupational exposure limits:**

Data not available.

Biological indicators: Not found.

Other limits and values: N.A.

Measures of engineering control: Handling the product in a place with good natural or mechanical ventilation, in order to keep the concentration of vapors/dust below the tolerance limit. Provide mechanical ventilation and direct exhaust system to the outside environment. These measures help to reduce exposure to the product. It is recommended to make emergency showers and eye washes available in the work area. Engineering control measures are most effective in reducing product exposure.

Appropriate Personal Protective Equipment:**Appropriate respiratory safety equipment in case of low concentrations or short term exposure:**

Medium efficiency filter for solid and liquid particles.

Hand protection: Chemical resistant gloves.

Eye protection: Safety glasses with side shields (framed glasses).

Protection of the skin and body: Lightweight clothing to protect.

Hygiene measures: Hands and face should be washed before breaks and at the end of the shift. Remove immediately all contaminated clothing. Wash contaminated clothing before reuse.

9. - PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Clear liquid.

Color: Colorless to slightly yellow.

Odor: Characteristic.

10% pH: 7.0 - 9.0.

Flash point: 162°O

Boiling point: 100°C

Auto-ignition temperature: Not available.

Explosive properties: Not available.

Solidification point: 0°C

Density at 20°C: Approximate 1.5 g/cm³

Evaporation rate: Not available.

Flammability (solid): Not applicable.

Lower/upper flammability or explosiveness limit: Not applicable.

Vapor pressure: Not available.

Vapor Density: Not available.

Partition coefficient - n-octanol / water: Not available.

Boiling point: 100°C.

Solubility in water: Soluble.

Dynamic Viscosity at 25°C: Less than 6000 (mPa.s)

Decomposition temperature: Hydrolysis can start at temperatures above 50°C.

10. - STABILITY AND REACTIVITY**Specific conditions:**

Reactivity: May react with concentrated strong oxidizers.

Chemical stability: Stable.

**Sodium Lauryl Ether Sulfate 27%**

REVISION DATE: 09/15/2022

Conditions to avoid: Avoid extreme temperatures. Avoid moisture. May react with concentrated strong oxidizers.

Materials or incompatible substances: Strongly acidic medium.

Hazardous decomposition products Hydrolysis releases sulfuric acid. Combustion produces carbon monoxide, carbon dioxide, sulfur oxides (di-e tri including sulfur oxides).

11. - TOXICOLOGICAL INFORMATION

Information according to the different routes of exposure:

Acute toxicity: DL50: Greater than 4000 mg/kg (Acute toxicity studies in rats).

Skin corrosion/irritation: Irritating to skin and eyes. Prolonged contact may cause irritation. **Severe**

ocular lesions/eye irritation: Risk of eye damage.

Respiratory or skin sensitization: Possible respiratory tract and skin irritation. Germ cell mutagenicity: It has no mutagenic effect.

Carcinogenicity: It has no carcinogenic effect.

Reproductive toxicity: It has no toxic effect on reproduction.

Specific target organ toxicity- single exposure: Not available.

Specific target organ toxicity- repetitive exposure: Not available. Aspiration hazard: Irritating.

Other: Irritating to the digestive tract, can cause severe damage.

12. - ECOLOGICAL INFORMATION

- Environmental effects, behaviors and impacts of the product:

Ecotoxicity: Toxic to aquatic life.

Persistence and degradability: The product complies with the European Community biodegradability. **Disposal**

Indications: The product is completely biodegradable. DBO5: > 60% of theoretical. In the environment (running water) it can completely degrade in 2 days. Therefore, there is a risk of rapid reduction of dissolved oxygen, which can make the environment toxic to fish and other aquatic organisms, even at low concentrations. **Mobility:**

Data not available.

Assessment of transport between environmental compartments:

Bioaccumulation

Bioaccumulation potential assessment:

It is not expected to accumulate in the environment.

Additional indications:

Other ecotoxicological indications:

Ultimate aerobic biodegradability: Biodegradable, 92.86% - 28 days, method: OECD Testing Guidelines 301.

13. - CONSIDERATIONS ABOUT TREATMENT AND DISPOSAL

Recommended methods for final disposal:

The treatment and disposal of product residues must be done in a suitable environment, by people trained in the use of special equipment and the recommended PPE's to avoid contact with the product, its vapors or mists. Leaks must be contained and collected for later disposal after neutralization.

Product:

Ensure all Federal, State and local agencies receive proper notice of spills and disposal methods. CONAMA Resolution 005/1993, Law No. 12,305, as of August 2, 2010 (National Solid Waste Policy).

Product waste:

Consult environmental regulatory agencies for advice on acceptable regulatory practices. Come in contact with relevant local authorities. It can be incinerated when in compliance with local regulations. Or dispose of in an approved chemical waste landfill.

Used Package:

Empty containers must be drained and covered before handling and transport operations. If the package is not properly washed and decontaminated, it is considered to contain the product.

**Sodium Lauryl Ether Sulfate 27%**

REVISION DATE: 09/15/2022

14. - TRANSPORT INFORMATION**National and International Regulations****Land:**

Resolution No. 5947/2021 of the Brazilian National Land Transport Agency (ANTT), Approves the Complementary Instructions to the Regulation of Land Transport of Dangerous Goods and its amendments.

UN number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

Waterway:

DPC – Directorate of Ports and Coasts (Transport in Brazilian waters) Maritime Authority Regulations (NORMAM) NORMAM 01/DPC: Vessels Used in Open-seas Navigation

UN number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

- Air Transport:

ANAC - National Civil Aviation Agency - Resolution No. 129 as of January 8, 2009

RBAC N°175 - (BRAZILIAN CIVIL AVIATION REGULATION) - TRANSPORTATION OF DANGEROUS ITEMS IN CIVIL AIRCRAFT IS No. 175-001 - SUPPLEMENTARY INSTRUCTION - IS

ICAO - "International Civil Aviation Organization" - Doc 9284-NA/905 IATA - "International Air Transport Association" Dangerous Goods Regulation (DGR)

UN number: Product not covered by current regulations on the transport of dangerous products.

Appropriate name for shipment: -

Risk class: -

Risk subclass: -

Risk number: -

Packing group: -

15. - REGULATORY INFORMATION**Specific regulations for the chemical product:**

Federal Decree No. 2,657, as of July 3, 1998;

Standard ABNT-NBR 14725:2014;

Ordinance No. 229, of May 24, 2011 - Amends Regulatory Standard No. 26.

16. - OTHER INFORMATION

The information on this sheet corresponds to the current state of our knowledge and experience of the product and is not exhaustive. It applies to the product under the conditions specified, unless otherwise stated. In case of combinations or mixtures, make sure that no new danger can appear. This information does not, in any case, exempt the user of the product from complying with all legislative, regulatory and administrative texts relating to the product, safety, hygiene and protection of human and environmental health.

Bibliographical References:

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on "Documentation" of Occupational Exposure Limits (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Translation Brazilian Association of Occupational Hygienists. São Paulo, 2016.



Sodium Lauryl Ether Sulfate 27%

REVISION DATE: 09/15/2022

BRAZIL MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 7: Occupational Health Medical Control Program. Brasília, DF. Jun. 1978.

BRAZIL MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 15: Unhealthy activities and operations. Brasília, DF. Jun. 1978.

US EPA. 2011. EPI Suite™ for Microsoft® Windows, v 4.10. United States: Environmental Protection Agency, Washington. 2011. Available at:

< <http://www.epa.gov/oppt/exposure/pubs/episuite.htm>>. Access on: September, 2022

Globally Harmonized System of Classification and Labelling of Chemicals (GHS). 9. rev. United Nations, 2021.

HSDB - HAZARDOUS SUBSTANCES DATA BANK. Available at: <<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>>. Access on: September, 2022

IARC- INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at: <<http://monographs.iarc.fr/ENG/Classification/index.php>>. Access on: September, 2022

IPCS - INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY - INCHEM. Available at: <<http://www.inchem.org/>>. Access on: September, 2022

IUCLID - INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATABASE. [S.l.]: European chemical Bureau. Available at: <<http://ecb.irc.ec.europa.eu>>. Access on: September, 2022

NIOSH - NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available at: <<http://www.cdc.gov/niosh/>>. Access on: September, 2022

NITE-GHS JAPAN - NATIONAL INSTITUTE OF TECHNOLOGY AND EVALUATION. Available at: <http://www.safe.nite.go.jp/english/ghs_index.html>. Access on: September, 2022

U.S. ENVIRONMENTAL PROTECTION AGENCY. ECOSAR - Ecological Structure-Activity Relationships. Version 1.11 Available at: <<http://www.epa.gov/oppt/newchems/tools/21ecosar.htm>>. Access on: September, 2022