



SAFETY DATA SHEET
SODIUM LAURYL ETHER SULPHATE (SLES)
REVISION 5, DATE 01 NOV 2021

1. IDENTIFICATION

Product Name	Sodium Lauryl Ether Sulphate (SLES)
Other Names	Alcohols, C12-14, ethoxylated, sulfates, sodium salts; Linear C12-14-alkanol, ethoxylated, sulfated, sodium salt; SLES 70%; SLES 70% 2EO; SLES 70% 3EO; Sodium Laureth Sulfate
Uses	Ingredient in personal and home care products.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Skin Corrosion/Irritation - Category 2



Serious Eye Damage/Irritation - Category 1

Long-term Hazard To The Aquatic Environment - Category 3

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

P280

Wear protective gloves/eye protection/face protection.

P273

Avoid release to the environment.

Response

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.

P302 + P352

IF ON SKIN: Wash with plenty of water.

P332 + P313

If skin irritation occurs: Get medical attention.

P362

Take off contaminated clothing.

Disposal

P501

Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification

Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Lauryl Ether Sulphate	Unspecified	68891-38-3	68 - 72 %
Water	H ₂ O	7732-18-5	Balance %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed

IF SWALLOWED: Rinse mouth, then drink 1 or 2 glasses of water. Do not induce vomiting. Get immediate medical



	advice/attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately!
Eye	IF IN EYES: Do not rub your eyes! Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice. *Chemical burns must be treated promptly by a physician!
Skin	IF ON SKIN: Flush skin with running water for at least 15 minutes, while removing contaminated clothing and shoes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse. *Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. If unconscious, place in recovery position and get medical attention immediately!
Advice to Doctor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. *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.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if you can do it without risk. Cool containers with water spray until well after fire is out. *No action shall be taken involving any personal risk or without suitable training.
Flammability Conditions	Combustible material; May burn but does not ignite readily.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jet.
Fire and Explosion Hazard	Containers may explode when heated. May emit flammable vapour if involved in fire.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases, including Carbon oxides, Sulfur dioxide and oxides of Sulfur.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	>93 °C
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	No action shall be taken involving any personal risk or without suitable training. Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Pick up with sand or other non-combustible absorbent material and place into containers for later disposal (see SECTION 13); move containers from spill area.
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far ahead of large spill for later disposal
Decontamination	No information available.
Environmental Precautionary Measures	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.
Evacuation Criteria	Spill or leak area should be isolated immediately. Evacuate surrounding areas. Keep unauthorised and unprotected personnel away.



Personal Precautionary Measures Put on appropriate personal protective equipment (see SECTION 8).
 *Wear appropriate respirator when ventilation is inadequate.

7. HANDLING AND STORAGE

Handling Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Open and handle container with care. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Take action to prevent static discharges. Avoid release to the environment.
 *In case the product becomes cloudy, thicker or frozen, melt (within 48 hours) at room temperature (at no higher than 50 °C) and stir it. Avoid direct heating. Do not open drums when melting material.

Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. 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. Keep away from heat and sources of ignition - No smoking. Keep away from food/drink and incompatible materials (see SECTION 10). Use appropriate containment to avoid environmental contamination.
 *Minimise temperature change. Optical storage temperature is 15 ~ 30 °C

Container Keep in the original container or an approved alternative made from a compatible material. Do not store in unlabelled containers. Empty containers retain product residue and can be hazardous. Do not reuse container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General No specific exposure standards are available for this product.
 Derived no-effect levels (DNELs) for Workers:
 COMPONENT: Sodium Lauryl Sulphate (CAS No. 68891-38-3):
 - Dermal exposure (Long-term, Systemic effects): 175 mg/m³
 - Inhalation exposure (Long-term, Systemic effects): 2,750 mg/kg bw/day

Exposure Limits No Data Available

Biological Limits No information available.

Engineering Measures If user operations generate dust, fumes, gas, vapour 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.

Personal Protection Equipment

- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Organic vapour/particulate filter respirator (refer to AS/NZS 1715 & 1716).
- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical goggles. Face-shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Hand protection: Wear protective gloves. Recommended: Impervious gloves. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls. Boots. Personal protective equipment for the body, 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.

Special Hazards Precautions 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.

Work Hygienic Practices 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.

9. PHYSICAL AND CHEMICAL PROPERTIES



Physical State	Liquid
Appearance	Paste/Pourable gelled liquid
Odour	Characteristic
Colour	White to yellowish
pH	>7.0 (1 aq. solution)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>100 °C
Melting Point	No Data Available
Freezing Point	8 - 12 °C
Solubility	Soluble in water 25°C
Specific Gravity	1.03 g/mL (Water = 1)
Flash Point	>93 °C
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	Not applicable.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Combustible material; May burn but does not ignite readily.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides, Sulfur dioxide and oxides of Sulfur.
Release of Invisible Flammable Vapours and Gases	May emit flammable vapour if involved in fire.

10. STABILITY AND REACTIVITY



General Information	Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical Stability	The product is stable.
Conditions to Avoid	Keep away from heat and sources of ignition. Take action to prevent static discharges.
Materials to Avoid	Incompatible/reactive with strong acids, oxidising agents.
Hazardous Decomposition Products	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides, Sulfur dioxide and oxides of Sulfur.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: May be harmful if swallowed. Adverse symptoms may include stomach pains. - Skin corrosion/irritation: Causes skin irritation. Adverse symptoms may include pain or irritation, redness, blistering may occur. - Eye damage/irritation: Causes serious eye damage. Adverse symptoms may include pain, watering, redness. - Respiratory/skin sensitisation: Not sensitising [Guinea pig, skin] (Alcohols, C12-14, ethoxylated, sulfates, sodium salts). - Germ cell mutagenicity: Negative, in vitro [OECD 471, OECD 476] (Alcohols, C12-14, ethoxylated, sulfates, sodium salts). - Carcinogenicity: Not considered to be a carcinogen. - Reproductive toxicity: No information available. - STOT (single exposure): No information available. - STOT (repeated exposure): No information available. - Aspiration toxicity: No information available.
Acute	
Ingestion	Acute toxicity (Oral): COMPONENT: Sodium Lauryl Ether Sulphate (CAS No. 68891-38-3): - LD50, Rat: 2,870 mg/kg bw. [OECD Guideline 401; ECHA].
Other	Acute toxicity (Dermal): COMPONENT: Sodium Lauryl Ether Sulphate (CAS No. 68891-38-3): - LD50, Rat: >2,000 mg/kg bw. [OECD Guideline 402; ECHA].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: COMPONENT: Alcohols, C12-14, ethoxylated, sulfates, sodium salts: - LC50, Fish (Danio rerio): 7.1 mg/l (96 h) [Supplier's SDS]. - EC50, Crustacea (Daphnia magna): 7.2 mg/l (48 h) [Supplier's SDS]. - EC50, Algae (Desmodesmus subspicatus): 27 mg/l (72 h) [Supplier's SDS]. - NOEC, Crustacea (Daphnia magna): 0.18 mg/l (21 d) [Supplier's SDS].
Persistence/Degradability	This product is readily biodegradable (>70 %, 28 d) [OECD 301A] (Alcohols, C12-14, ethoxylated, sulfates, sodium salts).
Mobility	The product will dissolve in water.
Environmental Fate	Harmful to aquatic life with long lasting effects. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Bioaccumulation Potential	Low bioaccumulative potential (LogPow: 0.3) (Alcohols, C12-14, ethoxylated, sulfates, sodium salts).
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable
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product(s) via a licensed waste disposal contractor and in accordance with local/regional/national regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special Precautions for Land Fill

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Sodium Lauryl Ether Sulphate
Class	C2 Combustible Liquids - Flash Point >93°C, Closed Cup, Not Excluded Flammable
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Sodium Lauryl Ether Sulphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	Sodium Lauryl Ether Sulphate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.



National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION**General Information**

No Data Available

Poisons Schedule (Aust)

Not Scheduled

National/Regional Inventories

Australia (AIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Listed
China (IECSC)	Listed
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	KE-32438
Malaysia (List of Classified Substances)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Taiwan (TCSI)	Not Determined
USA (TSCA)	Listed
Mexico (INSQ)	Not Determined

16. OTHER INFORMATION**Related Product Codes**

SOLAET0100, SOLAET0200, SOLAET0600, SOLAET0700, SOLAET0800, SOLAET0900, SOLAET0901, SOLAET0902, SOLAET0903, SOLAET0904, SOLAET0905, SOLAET0906, SOLAET0907, SOLAET0908, SOLAET0909, SOLAET0910, SOLAET0911, SOLAET0912, SOLAET0913, SOLAET0914, SOLAET0915, SOLAET0916, SOLAET0917, SOLAET0918, SOLAET0928, SOLAET0950, SOLAET0970, SOLAET0971, SOLAET1000, SOLAET1001, SOLAET1002, SOLAET1003, SOLAET1004, SOLAET1005, SOLAET1006, SOLAET1007, SOLAET1008, SOLAET1009, SOLAET1010, SOLAET1011, SOLAET1012, SOLAET1013, SOLAET1014, SOLAET1015, SOLAET1016, SOLAET1017, SOLAET1018, SOLAET1019, SOLAET1020, SOLAET1021, SOLAET1022, SOLAET1026, SOLAET1100, SOLAET1200, SOLAET1300, SOLAET1400, SOLAET1500, SOLAET1600, SOLAET1700, SOLAET1800, SOLAET1801, SOLAET1802, SOLAET1803, SOLAET1804, SOLAET1805, SOLAET1806, SOLAET1807, SOLAET1808, SOLAET1809, SOLAET1810, SOLAET1900, SOLAET2000, SOLAET2001, SOLAET2010, SOLAET2011, SOLAET2012, SOLAET2100, SOLAET2200, SOLAET2300, SOLAET2301, SOLAET2302, SOLAET2500, SOLAET2600, SOLAET2700, SOLAET2900, SOLAET3000, SOLAET3001, SOLAET3002, SOLAET3003,



SOLAET3004, SOLAET3005, SOLAET3006, SOLAET3020, SOLAET3030, SOLAET3200, SOLAET3210, SOLAET3211, SOLAET3220, SOLAET3221, SOLAET3500, SOLAET3510, SOLAET3522, SOLAET3600, SOLAET3605, SOLAET3610, SOLAET3615, SOLAET3700, SOLAET3800, SOLAET3801, SOLAET4000, SOLAET4001, SOLAET4200, SOLAET4303, SOLAET4307, SOLAET4308, SOLAET4310, SOLAET4317, SOLAET4500, SOLAET4501, SOLAET4510, SOLAET4511, SOLAET4512, SOLAET4513, SOLAET4522, SOLAET4525, SOLAET4528, SOLAET4529, SOLAET4570, SOLAET4600, SOLAET4800, SOLAET5000, SOLAET5018, SOLAET5026, SOLAET5027, SOLAET5028, SOLAET5500, SOLAET6000, SOLAET6500, SOLAET6600, SOLAET6601, SOLAET6621, SOLAET6623, SOLAET6630, SOLAET6631, SOLAET6632, SOLAET6638, SOLAET6639, SOLAET6650, SOLAET6651, SOLAET6800, SOLAET6801, SOLAET6802, SOLAET6822, SOLAET6900, SOLAET7000, SOLAET7001, SOLAET7300, SOLAET7301, SOLAET7400, SOLAET7401, SOLAET7500, SOLAET7501, SOLAET7600, SOLAET7601, SOLAET7602, SOLAET7700, SOLAET7701, SOLAET7800, SOLAET7801, SOLAET8000, SOLAET8100, SOLAET8200, SOLAET8300, SOLAET8500, SOLAET8600, SOLAET8601, SOLAET8700, SOLAET9000, SOLAET9001, SOLAET9100, SOLAET9200, SOLAET9202, SOLAET9210, SOLAET9211, SOLAET9212, SOLAET9220, SOLAET9222, SOLAET9500, SOLAET9600, SOLAET9900, SOLAET9901

Revision

5

Revision Date

01 Nov 2021

Reason for Issue

Updated SDS

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances**atm** Atmosphere**CAS** Chemical Abstracts Service (Registry Number)**cm²** Square Centimetres**CO₂** Carbon Dioxide**COD** Chemical Oxygen Demand**deg C (°C)** Degrees Celcius**EPA (New Zealand)** Environmental Protection Authority of New Zealand**deg F (°F)** Degrees Fahrenheit**g** Grams**g/cm³** Grams per Cubic Centimetre**g/l** Grams per Litre**HSNO** Hazardous Substance and New Organism**IDLH** Immediately Dangerous to Life and Health**immiscible** Liquids are insoluble in each other.**inHg** Inch of Mercury**inH₂O** Inch of Water**K** Kelvin**kg** Kilogram**kg/m³** Kilograms per Cubic Metre**lb** Pound**LC₅₀** LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.**LD₅₀** LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.**ltr or L** Litre**m³** Cubic Metre**mbar** Millibar**mg** Milligram**mg/24H** Milligrams per 24 Hours**mg/kg** Milligrams per Kilogram**mg/m³** Milligrams per Cubic Metre**Misc or Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.**mm** Millimetre**mmH₂O** Millimetres of Water**mPa.s** Millipascals per Second**N/A** Not Applicable**NIOSH** National Institute for Occupational Safety and Health**NOHSC** National Occupational Health and Safety Commission**OECD** Organisation for Economic Co-operation and Development**Oz** Ounce**PEL** Permissible Exposure Limit**Pa** Pascal**ppb** Parts per Billion**ppm** Parts per Million

ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight

