

#### 1. IDENTIFICATION

Product Name Ammonium Lauryl Sulphate Solution

Other Names ALS 26%

**Uses** Foaming agent and emulsifier; Shampoo; Detergent; Industrial use.

Chemical FamilyNo Data AvailableChemical FormulaC12H26O4S.H3N

Chemical Name Sulfuric acid, monododecyl ester, ammonium salt

Product Description No Data Available

# **Contact Details of the Supplier of this Safety Data Sheet**

 Organisation
 Location
 Telephone

 Redox Ltd
 2 Swettenham Road
 +61-2-97333000

Minto NSW 2566 Australia

Redox Ltd 11 Mayo Road +64-9-2506222

Wiri Auckland 2104 New Zealand

Redox Inc. 3960 Paramount Boulevard +1-424-675-3200

Suite 107

Lakewood CA 90712

USA

Redox Chemicals Sdn Bhd Level 2, No. 8, Jalan Sapir 33/7 +60-3-5614-2111

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

## **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
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420

## 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled

+1-703-527-3887



#### **Globally Harmonised System**

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Acute Toxicity (Oral) - Category 4

Acute Toxicity (Dermal) - Category 5 Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Irritation - Category 2A

**Pictograms** 



Signal Word Warning

Hazard Statements H302 Harmful if swallowed.

**H313** May be harmful in contact with skin.

**H315** Causes skin irritation.

**H319** Causes serious eye irritation.

**Precautionary Statements** Prevention **P270** Do not eat, drink or smoke when using this product.

**P280** Wear protective gloves/eye protection/face protection.

Response **P337 + P313** If eye irritation persists: Get medical advice.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P330 Rinse mouth.

P312 Call a POISON CENTER or doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Remove contaminated clothing and flush skin and hair with

running water/shower.

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)

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

**HSNO Classifications** Health Hazards **6.1D** Substances that are acutely toxic - Harmful

6.3A Substances that are irritating to the skin6.4A Substances that are irritating to the eye

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Water	H2O	7732-18-5	73 - 75 %
Ammonium lauryl sulfate	C12H29NO4S	2235-54-3	25 - 27 %
Sodium benzoate	Unspecified	532-32-1	<=0.5 %

#### 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

**Swallowed** IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Call a Poison Centre or

doctor/physician for advice. Never give anything by mouth to an unconscious person. Get medical attention

IMMEDIATELY!

Eve IF IN 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. Get

medical attention IMMEDIATELY!

Skin IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately flush skin and hair with running

water for at least 15 minutes. Wash contaminated clothing and shoes before reuse. Get medical attention IMMEDIATELY!

Inhaled IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or

doctor/physician for advice. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

Get medical attention IMMEDIATELY!

**Advice to Doctor** Treat symptomatically. Show this safety data sheet (SDS) to the doctor in attendance.

Medical Conditions Aggravated by No information available.

**Exposure** 

#### **5. FIRE FIGHTING MEASURES**

**General Measures** If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.

**Flammability Conditions** Combustible liquid; may burn but does not ignite readily.

**Extinguishing Media** Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction.

Fire and Explosion Hazard Containers may explode when heated.

**Hazardous Products of** 

Fire may produce irritating, toxic and/or corrosive fumes, including Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Combustion Sulphuric acid.

**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** No Data Available **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**

Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk **General Response Procedure** 

through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.

Clean Up Procedures Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION

13).

Containment Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Dike far ahead of large spill for later

disposal.

**Decontamination** No information available.

**Environmental Precautionary** 

Measures

Prevent entry into drains and waterways.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

#### 7. HANDLING AND STORAGE

Handling Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure

adequate ventilation. Handle with care and in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Keep the temperature below 50 °C during melting. Do not apply direct heat source. After

dissolving, mix thoroughly and check pH.

Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat

and sources of ignition - No smoking. Protect from freezing - If the product freezes, it will be separated into upper and

lower layers. Keep away from incompatible materials (see SECTION 10).

\*Storage temperature should be 20  $^{\circ}$  40  $^{\circ}$ C for drum and 35  $^{\circ}$  50  $^{\circ}$ C for bulk tank.

**Container** Keep in the original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General** Contains no substances with occupational exposure limit values.

**Exposure Limits** No Data Available

**Biological Limits** No information available.

**Engineering Measures** A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust

ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing

dispersion of it into the general work area.

Personal Protection Equipment - Respiratory protection: Respiratory protection is required when used frequently or when exposure is severe; required

when vapours/aerosols are generated (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Wear chemical safety glasses or goggles.

- Hand protection: Wear protective gloves. Recommended: Wear chemical-resistant gloves.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Wear

chemical-resistant clothing.

**Special Hazards Precaustions** No information available.

Work Hygienic Practices Do not eat, drink or smoke when using this product. Wash hands and face after working with substance. Immediately

change contaminated clothing. Wash contaminated clothing before reuse.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Transparent liquid
Odour Characteristic
Colour Yellow

pH 6.0 - 7.0 (2% soln)
Vapour Pressure 2,200 Pa (@ 20 °C)
Relative Vapour Density No Data Available

**Boiling Point**  $100 \, ^{\circ}\text{C}$  **Melting Point**  $3.5 \, ^{\circ}\text{C}$ 

Freezing Point No Data Available
Solubility Soluble in water

Specific Gravity 1.017

**Flash Point** No Data Available **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 1.52 Pa.s (@ 20 °C) **Volatile Percent** No Data Available

Additional Characteristics No information available.

Potential for Dust Explosion Not applicable.

Fast or Intensely Burning

Characteristics

**VOC Volume** 

No information available.

No Data Available

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 liquid; may burn but does not ignite readily.

**Reactions That Release Gases or** 

Vapours

Fire/decomposition may produce irritating, toxic and/or corrosive fumes, including Carbon oxides, Nitrogen oxides (NOx),

Ammonia, Sulphur oxides, Sulphuric acid.

Release of Invisible Flammable

Vapours and Gases

No information available.

# 10. STABILITY AND REACTIVITY

**General Information** No information available.

**Chemical Stability** Stable at normal temperature and storage conditions.

**Conditions to Avoid** Avoid overheating. Keep away from heat and sources of ignition.

Materials to Avoid Incompatible/reactive with strong oxidising agents.

**Hazardous Decomposition** 

**Products** 

Fire/decomposition may produce irritating, toxic and/or corrosive fumes, including Carbon oxides, Nitrogen oxides (NOx),

Ammonia, Sulphur oxides, Sulphuric acid.

**Hazardous Polymerisation** 

Will not occur.

#### 11. TOXICOLOGICAL INFORMATION

#### **General Information**

- Acute toxicity: Harmful if swallowed. May be harmful in contact with skin. Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. COMPONENT: Ammonium lauryl sulfate (CAS No. 2235-54-3) is Harmful if swallowed and in contact with skin.
- Skin corrosion/irritation: Causes skin irritation.
- Eye damage/irritation: Causes serious eye irritation. COMPONENT: Ammonium lauryl sulfate (CAS No. 2235-54-3) is a severe eye irritant [NICNAS].
- Respiratory/skin sensitisation: There is no information available to indicate that Ammonium lauryl sulfate (CAS No. 2235-54-3) is a skin sensitiser [NICNAS].
- Germ cell mutagenicity: Not genotoxic [NICNAS].
- Carcinogenicity: No information available.
- Reproductive toxicity: Does not show specific reproductive or developmental toxicity [NICNAS].
- STOT (single exposure): COMPONENT: Ammonium lauryl sulfate (CAS No. 2235-54-3) May cause respiratory irritation.
- STOT (repeated exposure): Not considered to cause serious damage to health through repeated (oral) exposure

[NICNAS].

- Aspiration toxicity: No information available.

Acute

**Ingestion** Acute toxicity (Oral):

COMPONENT: Ammonium lauryl sulfate (CAS No. 2235-54-3):

- LD50, Rat: >135 mg/kg bw. [NICNAS].

Other Acute toxicity (Dermal):

COMPONENT: Ammonium lauryl sulfate (CAS No. 2235-54-3):

- LD50: 580 mg/kg bw. [Supplier's SDS].

Carcinogen Category

None

# 12. ECOLOGICAL INFORMATION

 Ecotoxicity
 No information available.

 Persistence/Degradability
 No information available.

 Mobility
 No information available.

**Environmental Fate** Prevent entry into drains and waterways.

Bioaccumulation Potential No information available.

Environmental Impact No Data Available

#### 13. DISPOSAL CONSIDERATIONS

**General Information** Dispose of contents/container in accordance with local/regional/national regulations.

**Special Precautions for Land Fill** Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## 14. TRANSPORT INFORMATION

# Land Transport (Australia)

ADG Code

Proper Shipping Name Ammonium Lauryl Sulphate Solution

Class No Data Available
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.

# Land Transport (Malaysia)

ADR Code

Proper Shipping Name Ammonium Lauryl Sulphate Solution

Class No Data Available
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.

# Land Transport (New Zealand)

NZS5433

Proper Shipping Name Ammonium Lauryl Sulphate Solution

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

**Comments** NON-DANGEROUS GOODS: Not regulated for LAND transport.

# Land Transport (United States of America)

US DOT

Proper Shipping Name Ammonium Lauryl Sulphate Solution

Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Sea Transport** 

**IMDG** Code

Proper Shipping Name Ammonium Lauryl Sulphate Solution

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 Ammonium Lauryl Sulphate Solution

ClassNo Data AvailableSubsidiary Risk(s)No Data AvailableUN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo 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

**Environmental Protection Authority (New Zealand)** 

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR002503

HSR006609 (Revoked)

**National/Regional Inventories** 

Australia (AIIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

**Europe (EINECS)** 218-793-9

Europe (REACh) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

**Switzerland (Inventory of Notified** 

Substances)

Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Not Determined

#### 16. OTHER INFORMATION

Related Product Codes AMLAUR1000, AMLAUR1001, AMLAUR1002, AMLAUR1003, AMLAUR1004, AMLAUR1005, AMLAUR1006, AMLAUR1007,

AMLAUR1008, AMLAUR5260, AMLAUR5261, AMLAUR5262, AMLAUR5263, AMLAUR5264, AMLAUR5265, AMLAUR5266

Revision 4

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

**COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

**g** Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

**HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable 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.

Itr or L Litre

m<sup>3</sup> 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

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

**NIOSH** National Institute for Occupational Safety and Health

**NOHSC** National Occupational Heath 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