



# SAFETY DATA SHEET SODIUM LACTATE REVISION 4, DATE 17 JUN 2024

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Sodium Lactate</b>
<b>Other Names</b>	No Data Available
<b>Uses</b>	To be used as humectant, antioxidant or flavouring agent in the food industries, especially in meat industry. Also used as humectant, antioxidant synergist, or bodying agent in other industries, like cosmetic and pharmaceutical industry.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C <sub>3</sub> H <sub>5</sub> NaO <sub>3</sub>
<b>Chemical Name</b>	Sodium lactate, aqueous solution
<b>Product Description</b>	No Data Available

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

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
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	Suite 13A.03, Menara Summit Persiaran Kewajipan USJ1 47600 UEP Subang Jaya Selangor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

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

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Poisons Information Centre	Australia – Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
National Poison Centre	Malaysia	+60-4-6536-999
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

### Poisons Schedule (Aust)

Not Scheduled

Redox Ltd  
Corporate Office Sydney  
Locked Bag 15 Minto NSW 2566 Australia  
2 Swettenham Road Minto NSW 2566 Australia  
All Deliveries: 4 Holmes Road Minto NSW 2566 Australia

Phone +61 2 9733 3000  
Fax +61 2 9733 3111  
E-mail [sydney@redox.com](mailto:sydney@redox.com)  
Web [www.redox.com](http://www.redox.com)  
ABN 92 000 762 345

Australia  
Adelaide  
Brisbane  
Melbourne  
Perth  
Sydney

New Zealand  
Auckland  
Christchurch  
Hawke's Bay  
UK  
London

Malaysia  
Kuala Lumpur  
USA  
Los Angeles  
Oakland  
Mexico  
Saltillo



Globally Harmonised System

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Signal Word	None

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)
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Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification	NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium lactate	C3H5NaO3	72-17-3	58 - 62 %
Water	H2O	7732-18-5	Balance %

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. Get medical advice/attention if you feel unwell.
Eye	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. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
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.
Advice to Doctor	Treat symptomatically. Show this safety data sheet to the doctor in attendance. *Most important symptoms and effects, both acute and delayed: May cause eye irritation.
Medical Conditions Aggravated by Exposure	No information available.

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. Dike fire-control water for later disposal.
Flammability Conditions	Non-combustible; however, following evaporation of the water component of the material, the residual material can burn if ignited.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction.
Fire and Explosion Hazard	Containers may explode when heated.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases, including Carbon oxides, Sodium oxides.
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

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid breathing mist/aerosols 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).
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas.
Decontamination	Flush with water.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

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. Avoid breathing mist/aerosols and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
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. Keep away from incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.
Exposure Limits	No Data Available
Biological Limits	No information available.
	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust

<b>Engineering Measures</b>	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.
<b>Personal Protection Equipment</b>	<ul style="list-style-type: none"> <li>- Respiratory protection: In case of mist/aerosols formation, wear respiratory protection. Recommended: Particulate/mist respirator (refer to AS/NZS 1715 &amp; 1716).</li> <li>- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical goggles.</li> <li>- Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Nitrile rubber.</li> <li>- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.</li> </ul>
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash hands after working with substance. Take off contaminated clothing and wash it before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Liquid
<b>Odour</b>	Slight/none
<b>Colour</b>	Light yellow
<b>pH</b>	6.0 - 8.0 (10% aqueous solution)
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	110 °C (60% solution)
<b>Melting Point</b>	No Data Available
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Miscible with water
<b>Specific Gravity</b>	1.32 - 1.34 g/mL (60% solution)
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	>200 °C
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	80 - 160 mPa.s (@ 20 °C)
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	Not applicable.

<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; however, following evaporation of the water component of the material, the residual material can burn if ignited.
<b>Reactions That Release Gases or Vapours</b>	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides, Sodium oxides.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	No information available.
<b>Chemical Stability</b>	Stable at room temperature, in closed containers under normal storage and handling conditions.
<b>Conditions to Avoid</b>	Avoid excessive heat.
<b>Materials to Avoid</b>	Incompatible/reactive with strong oxidants.
<b>Hazardous Decomposition Products</b>	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides, Sodium oxides.
<b>Hazardous Polymerisation</b>	Hazardous polymerisation does not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<p>Information on toxicological effects:</p> <ul style="list-style-type: none"><li>- Acute toxicity: By way of read-across from Lactic acid and Sodium chloride, Sodium lactate is evaluated to be acutely non-toxic via any of the standard routes of administration.</li><li>- Skin corrosion/irritation: Not irritating [read-across from the structurally equivalent substances].</li><li>- Serious eye damage/irritation: Not irritating [read-across from the structurally equivalent substances].</li><li>- Respiratory/skin sensitisation: Based on the available data, classification of Sodium lactate for skin sensitisation is not warranted.</li><li>- Germ cell mutagenicity: Based on the available data, Sodium lactate can be considered to be non-genotoxic.</li><li>- Carcinogenicity: Based on tests with L-lactic acid and its salts, there is no evidence to suggest carcinogenic nor mutagenic properties from lactic acid itself nor from the lactate portion of its metal salts.</li><li>- Reproductive toxicity: Sodium lactate is considered not to exert any adverse effects on fertility or developmental toxicity.</li><li>- STOT (single exposure): No data available.</li><li>- STOT (repeated exposure): Based on the available data, classification of Sodium lactate is not warranted.</li><li>- Aspiration toxicity: No data available.</li></ul> <p>Information on likely routes of exposure:</p> <ul style="list-style-type: none"><li>- Ingestion: May cause irritation of the digestive tract.</li><li>- Eye contact: May cause eye irritation.</li><li>- Skin contact: May cause skin irritation.</li><li>- Inhalation: May cause respiratory tract irritation.</li></ul> <p>Chronic effects: No information available.</p>
<b>Acute</b>	
<b>Ingestion</b>	<p>Acute toxicity (Oral):</p> <ul style="list-style-type: none"><li>- LD50, Rat: &gt;2,000 mg/kg bw. [Read-across: Sodium chloride and lactic acid].</li></ul>
<b>Carcinogen Category</b>	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Ecological injuries are not known or expected under normal use (No effect on Daphnia @ 10g/l).
Persistence/Degradability	Product is a salt of lactic acid, which is readily biodegradable.
Mobility	Completely soluble.
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	Unlikely.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Waste from residues/unused product can be disposed as waste water, when in compliance with local regulations, or can be landfilled or incinerated, when in compliance with local regulations.
Special Precautions for Land Fill	Clean container with water. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code	
Proper Shipping Name	Sodium Lactate
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	Sodium Lactate
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	Sodium Lactate
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 (United States of America)

US DOT

Proper Shipping Name	Sodium Lactate
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.

Sea Transport

IMDG Code

Proper Shipping Name	Sodium Lactate
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 Lactate
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 &amp; 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 &amp; 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**

Not Hazardous

**National/Regional Inventories****Australia (AIC)**

Listed

**Canada (DSL)**

Listed

**Canada (NDSL)**

Not Determined

**China (IECSC)**

Listed

**Europe (EINECS)**

200-772-0

**Europe (REACH)**

Not Determined

**Japan (ENCS/METI)**

Listed

**Korea (KECI)**

Listed

**Malaysia (List of Classified Substances)**

Not Determined

**New Zealand (NZIoC)**

Listed

**Philippines (PICCS)**

Listed

**Taiwan (TCSI)**

Listed

**USA (TSCA)**

Listed

**Mexico (INSQ)**

Not Determined

**16. OTHER INFORMATION****Related Product Codes**

SOLACT1000, SOLACT1001, SOLACT1002, SOLACT1003, SOLACT1004, SOLACT1005, SOLACT2000, SOLACT2001, SOLACT2100, SOLACT2200, SOLACT3000, SOLACT4000, SOLACT6000, SOLACT7000, SOLACT7200, SOLACT7400



Revision	4
Revision Date	17 Jun 2024
Key/Legend	<p>&lt; Less Than</p> <p>&gt; Greater Than</p> <p><b>AICS</b> Australian Inventory of Chemical Substances</p> <p><b>atm</b> Atmosphere</p> <p><b>CAS</b> Chemical Abstracts Service (Registry Number)</p> <p><b>cm<sup>2</sup></b> Square Centimetres</p> <p><b>CO<sub>2</sub></b> Carbon Dioxide</p> <p><b>COD</b> Chemical Oxygen Demand</p> <p><b>deg C (°C)</b> Degrees Celcius</p> <p><b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand</p> <p><b>deg F (°F)</b> Degrees Farenheit</p> <p><b>g</b> Grams</p> <p><b>g/cm<sup>3</sup></b> Grams per Cubic Centimetre</p> <p><b>g/l</b> Grams per Litre</p> <p><b>HSNO</b> Hazardous Substance and New Organism</p> <p><b>IDLH</b> Immediately Dangerous to Life and Health</p> <p><b>immiscible</b> Liquids are insoluable in each other.</p> <p><b>inHg</b> Inch of Mercury</p> <p><b>inH<sub>2</sub>O</b> Inch of Water</p> <p><b>K</b> Kelvin</p> <p><b>kg</b> Kilogram</p> <p><b>kg/m<sup>3</sup></b> Kilograms per Cubic Metre</p> <p><b>lb</b> Pound</p> <p><b>LC<sub>50</sub></b> LC stands for lethal concentration. LC<sub>50</sub> 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.</p> <p><b>LD<sub>50</sub></b> LD stands for Lethal Dose. LD<sub>50</sub> is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.</p> <p><b>ltr or L</b> Litre</p> <p><b>m<sup>3</sup></b> Cubic Metre</p> <p><b>mbar</b> Millibar</p> <p><b>mg</b> Milligram</p> <p><b>mg/24H</b> Milligrams per 24 Hours</p> <p><b>mg/kg</b> Milligrams per Kilogram</p> <p><b>mg/m<sup>3</sup></b> Milligrams per Cubic Metre</p> <p><b>Misc or Miscible</b> Liquids form one homogeneous liquid phase regardless of the amount of either component present.</p> <p><b>mm</b> Millimetre</p> <p><b>mmH<sub>2</sub>O</b> Millimetres of Water</p> <p><b>mPa.s</b> Millipascals per Second</p> <p><b>N/A</b> Not Applicable</p> <p><b>NIOSH</b> National Institute for Occupational Safety and Health</p> <p><b>NOHSC</b> National Occupational Heath and Safety Commission</p> <p><b>OECD</b> Organisation for Economic Co-operation and Development</p> <p><b>Oz</b> Ounce</p> <p><b>PEL</b> Permissible Exposure Limit</p> <p><b>Pa</b> Pascal</p> <p><b>ppb</b> Parts per Billion</p> <p><b>ppm</b> Parts per Million</p> <p><b>ppm/2h</b> Parts per Million per 2 Hours</p> <p><b>ppm/6h</b> Parts per Million per 6 Hours</p> <p><b>psi</b> Pounds per Square Inch</p> <p><b>R</b> Rankine</p> <p><b>RCP</b> Reciprocal Calculation Procedure</p> <p><b>STEL</b> Short Term Exposure Limit</p> <p><b>TLV</b> Threshold Limit Value</p> <p><b>tne</b> Tonne</p> <p><b>TWA</b> Time Weighted Average</p> <p><b>ug/24H</b> Micrograms per 24 Hours</p> <p><b>UN</b> United Nations</p> <p><b>wt</b> Weight</p>