

**sodium-L-lactate**

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**SECTION 1. IDENTIFICATION**

Product name : sodium-L-lactate

Substance name : sodium-L-lactate aqueous solution

Molecular formula : C3-H5-O3-Na

Chemical identity : Sodium (S)-2-hydroxypropanoate

CAS-No. : 867-56-1

Chemical nature : Aqueous solution

**Manufacturer or supplier's details****Details of the supplier of the safety data sheet**

Company : Jungbunzlauer Inc.  
7 Wells Avenue  
Newton Centre, Massachusetts 02459  
USA

Telephone : +1 617 969-0900

**Emergency telephone number**

Emergency telephone number : National Chemical Emergency Centre  
(NCEC)  
+1 202 464 2554

**Recommended use of the chemical and restrictions on use**

Recommended use : Food/ feedstuff additives  
Pharmaceutical substance  
Personal care  
Cleaning agent  
Industrial use

Restrictions on use : None known.

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**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with 29 CFR 1910.1200**

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**GHS label elements**

No labeling elements required.

**Hazards Not Otherwise Classified**

None known.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

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Substance / Mixture : Mixture

Substance name : sodium-L-lactate aqueous solution

CAS-No. : 867-56-1

Chemical nature : Aqueous solution

**Hazardous components**

| Chemical name             | CAS-No.   | Concentration (% w/w) |
|---------------------------|-----------|-----------------------|
| Non-hazardous ingredients |           |                       |
| Sodium-L-lactate          | 867-56-1  | 60                    |
| H2O                       | 7732-18-5 | 40                    |

**SECTION 4. FIRST AID MEASURES**

General advice : If you feel unwell, seek medical advice (show the label where possible).  
Show this safety data sheet to the doctor in attendance.

If inhaled : If breathed in, move person into fresh air.  
If symptoms persist, call a physician.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.

In case of skin contact : Immediately flush skin with large amounts of water.

In case of eye contact : If easy to do, remove contact lens, if worn.  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
If eye irritation persists, consult a specialist.

If swallowed : If swallowed, DO NOT induce vomiting.  
If symptoms persist, call a physician.  
Rinse mouth with water.

Most important symptoms and effects, both acute and delayed : No information available.  
None known.

Notes to physician : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray  
Dry powder  
Foam  
Carbon dioxide (CO<sub>2</sub>)

Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.

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Hazardous decomposition products formed under fire conditions.

- Further information : Standard procedure for chemical fires.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
In the event of fire and/or explosion do not breathe fumes.  
Use water spray to cool unopened containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Wear fire resistant or flame retardant clothing.
- 

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.  
Ensure adequate ventilation, especially in confined areas.  
Avoid inhalation of vapour or mist.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.  
Clean contaminated surface thoroughly.
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**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : For personal protection see section 8.  
Do not breathe vapours or spray mist.  
Avoid contact with skin and eyes.
- Conditions for safe storage : Store at room temperature in the original container.
- 

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

- Engineering measures** : Provide adequate ventilation.

**Personal protective equipment**

- Respiratory protection : Not required; except in case of aerosol formation.  
Use NIOSH approved respiratory protection.

**Hand protection**

- Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work.

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For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

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|--------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye protection           | : | In case of splash hazard, please wear protective goggles. Ensure that eyewash stations and safety showers are close to the workstation location.                                                                                                                                                                                                     |
| Skin and body protection | : | Choose body protection according to the amount and concentration of the dangerous substance at the work place.                                                                                                                                                                                                                                       |
| Protective measures      | : | Handle in accordance with good industrial hygiene and safety practice.                                                                                                                                                                                                                                                                               |
| Hygiene measures         | : | Handle in accordance with good industrial hygiene and safety practice.<br>General industrial hygiene practice.<br>Avoid breathing vapours, mist or gas.<br>Avoid contact with skin, eyes and clothing.<br>When using do not eat, drink or smoke.<br>Wash hands before breaks and at the end of workday.<br>Wash contaminated clothing before re-use. |

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- |                             |   |                                                                   |
|-----------------------------|---|-------------------------------------------------------------------|
| Appearance                  | : | Aqueous solution                                                  |
| Colour                      | : | colourless, light yellow                                          |
| Odour                       | : | slight, characteristic                                            |
| pH                          | : | 6.5 - 7.5 (77 °F)<br>Concentration: 20 %<br>(as aqueous solution) |
| Melting point/range         | : | No data available                                                 |
| Boiling point/boiling range | : | 240 °F                                                            |
| Flash point                 | : | does not flash                                                    |
| Evaporation rate            | : | No data available                                                 |
| Upper explosion limit       | : | Not applicable                                                    |
| Lower explosion limit       | : | Not applicable                                                    |
| Vapour pressure             | : | No data available                                                 |
| Relative vapour density     | : | No data available                                                 |
| Density                     | : | 1.26 - 1.34 g/cm <sup>3</sup> (68 °F)                             |

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|----------------------------------------|--------------------------|
| Solubility(ies)                        |                          |
| Water solubility                       | : completely miscible    |
| Partition coefficient: n-octanol/water | : log Pow: -1.52 (68 °F) |
| Decomposition temperature              | : > 392 °F               |
| Viscosity                              |                          |
| Viscosity, dynamic                     | : 80 - 160 mPa.s (68 °F) |
| Explosive properties                   | : Not applicable         |
| Dust explosion class                   | : Not applicable         |

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**SECTION 10. STABILITY AND REACTIVITY**

|                                    |                                                                                                                                                                                                                              |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | : No decomposition if stored and applied as directed.                                                                                                                                                                        |
| Chemical stability                 | : Stable under normal conditions.                                                                                                                                                                                            |
| Possibility of hazardous reactions | : Hazardous decomposition products formed under fire conditions.                                                                                                                                                             |
| Conditions to avoid                | : Temperature > 392 °F                                                                                                                                                                                                       |
| Incompatible materials             | : No data available<br>Avoid contact with other chemicals.                                                                                                                                                                   |
| Hazardous decomposition products   | : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.<br><br>Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.<br>Carbon dioxide (CO <sub>2</sub> )<br>Carbon monoxide |

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Components:****Sodium-L-lactate:**

|                                                 |                                                      |
|-------------------------------------------------|------------------------------------------------------|
| Acute oral toxicity                             | : LD50 Oral (Rat): 2,000 mg/kg                       |
| Acute toxicity (other routes of administration) | : LD50 (Rat): 2,000 mg/kg<br>Application Route: i.p. |

**Serious eye damage/eye irritation****Components:****Sodium-L-lactate:**

Contact with eyes may cause irritation.

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**Respiratory or skin sensitisation****Components:****Sodium-L-lactate:**

No known sensitising effect.

**Germ cell mutagenicity****Components:****Sodium-L-lactate:**

Germ cell mutagenicity - Assessment : No data available

**Carcinogenicity****Components:****Sodium-L-lactate:**

Carcinogenicity - Assessment : Contains no ingredient listed as a carcinogen

**Reproductive toxicity****Components:****Sodium-L-lactate:**

Reproductive toxicity - Assessment : No toxicity to reproduction

**Aspiration toxicity****Components:****Sodium-L-lactate:**

No data available

**Experience with human exposure****Product:**Inhalation : Target Organs: Respiratory system  
Symptoms: No information available.Skin contact : Target Organs: Skin  
Symptoms: No information available.Eye contact : Target Organs: Eyes  
Symptoms: No information available.Ingestion : Target Organs: Digestive organs  
Symptoms: No information available.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Sodium-L-lactate:**

Toxicity to daphnia and other aquatic invertebrates : Ecological injuries are not known or expected under normal use.

**Persistence and degradability****Product:**

Biodegradability : Test substance: L(+)-Lactic acid  
Readily biodegradable.

**Bioaccumulative potential****Product:**

Partition coefficient: n-octanol/water : log Pow: -1.52 (68 °F)

**Components:****Sodium-L-lactate:**

Bioaccumulation : The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

Partition coefficient: n-octanol/water : log Pow: -1.52 (20 °C)

**Mobility in soil**

No data available

**Other adverse effects****Components:****Sodium-L-lactate:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : In accordance with local and national regulations.  
Do not dispose of together with household waste.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**SECTION 14. TRANSPORT INFORMATION****International Regulations****IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****DOT**

Not regulated as a hazardous material

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act****SARA 311/312 Hazards** : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Water Act**

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:****EINECS** : On the inventory, or in compliance with the inventory**TSCA** : On TSCA Inventory**TSCA\_12b** : Not applicable**DSL** : All components of this product are on the Canadian DSL**REACH** : On the inventory, or in compliance with the inventory**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensa-

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tion, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.