

Revision date 24/02/2015
Date of the previous version 19/06/2014

SAFETY DATA SHEET
Version 2.1 - EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Sodium L-lactate
Trade name	PURASAL® S PURASAL® S/HQ 50 PURASAL® S/HQ 60 PURASAL® S/PF 50 (5.0-7.0) PURASAL® S/PF 50 (6.5-7.5) PURASAL® S/PF 60 PURASAL® S/PF 60 (7.4) PURASAL® S/PF 60 (5.3) PURASAL® S/PF 60 (5.3/BJP) PURASAL® S/PF 60 (6.6) PURASAL® S/PF 60 (6.6-7.0) PURASAL® S/PF 60 (6.6 NEAT)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Food additive, Specialty chemical.
Uses advised against	No information available.

1.3 Details of the supplier of the safety data sheet

Purac Biochem
Arkelsedijk 46
NL-4206 AC Gorinchem
The Netherlands
Tel.: +31 183 695695
Fax: +31 183 695604
E-mail: sds@corbion.com

1.4 Emergency telephone number

National Poisons Information Service (London Centre)
+44 20 7771 5307

Purac Biochem
+31 183 695695

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to EU
Regulation 1272/2008/EC

Not classified.

Classification according to EU
Directives 67/548/EEC or 1999/45/EC

Not classified.

2.2 Label elements

None.

2.3 Other hazards

This product does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical name	EC-No	CAS-No	Weight %	Classification (67/548/EEC)	Classification (1272/2008/EC)	REACH registration number
Sodium (S)-lactate	212-762-3	867-56-1	10-60	-	-	01-2119971048-3 3-0000

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Advice	No hazards which require special first aid measures. Wash contaminated clothing before re-use.
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately if symptoms occur.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur.
Ingestion	Rinse mouth. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Protection of first-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2 Most important symptoms and effects, both acute and delayed

Main symptoms	No acute and delayed symptoms and effects are observed.
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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.
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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media Water spray, Foam, Dry powder, Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Special Hazard Thermal decomposition can lead to release of irritating gases and vapours.

5.3 Advice for firefighters

Fire fighting measures Evacuate non-essential personnel. Move containers from fire area if you can do it without risk. Keep containers and surroundings cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not touch or walk through spilled material. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Use personal protective equipment. Ensure adequate ventilation.

6.2 Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Large amounts: Prevent further leakage or spillage if safe to do so. Dike to collect large spills. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water. Small amounts: Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water. Never return spills in original containers for re-use.

6.4 Reference to other sections

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Ensure adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Keep containers tightly closed in a cool, well-ventilated place. Keep at temperatures below 200 °C / 392 °F.

7.3 Specific end use(s)

Exposure scenario Not available.

Other information Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits Contains no substances with occupational exposure limit values.

Biological limit values Not established.

Recommended monitoring procedures No information available.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2 Exposure controls

Appropriate Engineering Controls Ensure adequate ventilation, especially in confined areas. Keep at temperatures below 200 °C / 392 °F.

Individual protection measures, such as personal protective equipment

Eye Protection

Tightly fitting safety goggles (EN166).

Hand Protection

Protective gloves (EN374): Butyl rubber. Glove thickness: 0.5 mm. Break through time: >8 hours.

Skin and Body Protection

Long sleeved clothing.

Respiratory Protection

None under normal use conditions.

Recommended Filter Type

A, Brown.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Workers must be trained in the proper use and handling of this product as required under applicable regulations. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.

Environmental exposure controls The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state @20°C	Liquid
Appearance	aqueous solution
Colour	Light yellow
Odour	(Almost) Odourless
pH	6.5-8.5 (@10-60%) (@25°C)
Melting/freezing point	Decomposes
Boiling point/boiling range	105 °C / 221 °F (@50%), 110 °C / 230 °F (@60%)
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Flammability Limits in Air	No information available
Explosion Limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	No information available
Solubility	
Water solubility	Miscible
Partition coefficient (n-octanol/water)	Log Pow: <-1.52 (@20°C)
Autoignition temperature	Not applicable
Decomposition temperature	> 200 °C / > 392 °F
Viscosity, dynamic	80-160 mPa.s (@20°C)
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2 Other information

Density	1320-1340 kg/m³ (@60%) (@20°C)
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None known.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Temperatures above 200 °C / 392 °F.

10.5 Incompatible materials

None in particular.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Ingestion	No known effect.
Skin Contact	No known effect.
Inhalation	No known effect.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium (S)-lactate	>2000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>7.94 mg/L (Rat) 4h

Skin Corrosion/Irritation No known effect.

Serious eye damage/irritation No known effect.

Respiratory or skin sensitisation No known effect.

Germ Cell Mutagenicity Not known to cause heritable genetic damage.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Reproductive Toxicity Not known to cause birth defects or have a deleterious effect on a developing fetus. Not known to adversely affect reproductive functions and organs.

STOT-single exposure No known effect.

STOT-repeated exposure No known effect.

Aspiration Hazard No known effect.

Sodium L-lactate

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Contains no substances known to be hazardous for the environment.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Micro-organisms	Toxicity to daphnia and other aquatic invertebrates
Sodium (S)-lactate	EC50: >2.8 g/L 72h Pseudokirchnerella subcapitata EC50: 3.5 g/L 70h Pseudokirchnerella subcapitata	LC50: 130 mg/L 96h Oncorhynchus mykiss LC50: 320 mg/L 96h Danio rerio	LC50: >100 mg/L 3h	EC50: 130 mg/L 48h Daphnia magna EC50: 250 mg/L 48h Daphnia magna

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bioaccumulative potential

Does not bioaccumulate.

Chemical name	Log Pow	Bioconcentration factor (BCF)
Sodium (S)-lactate	<-1.52	

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products Dispose of in accordance with local regulations.

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

SECTION 14: TRANSPORT INFORMATION

According to: ADR, RID, ADN, IMDG, IATA/ICAO.

14.1 UN number

Not regulated.

14.2 UN proper shipping name

Not regulated.

14.3 Transport hazard class(es)

Not regulated.

14.4 Packing group

Not regulated.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions on use None.

Other Regulations No information available.

15.2 Chemical safety assessment

Not available.

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3 Not applicable.

Full text of H-Statements referred to under sections 2 and 3 Not applicable

Revision note Indication of the changes made to the previous version of the SDS: Trade name.

Training Advice Workers must be trained in the proper use and handling of this product as required under applicable regulations.

Abbreviations/acronyms REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances
(E)EC: European Commission
STOT: Specific Target Organ Toxicity
PBT: Persistent, Bioaccumulating, Toxic
vPvB: very Persistent and very Bioaccumulating
ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route
ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures
IMDG: International Maritime Dangerous Goods Code
ICAO: International Civil Aviation Organization

SDS No. CO00008

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Regulation (EC) No. 453/2010. Label element according to Regulation (EC) No 1272/2008.

Disclaimer

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.

End of Safety Data Sheet