

Sodium-L- Lactate, PURASAL®S

REVISION DATE 07/03/00
REF. SD0130/us04

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name	Sodium-L-Lactate, PURASAL® S	
Product code	3001-3008, 3501-3608	
Supplier	PURAC America, Inc. 111 Barclay Blvd. Lincolnshire, IL 60069 USA	PBR sínteses Praça Pio X, 15, 9º andar CEP 20.040-020 Rio de Janeiro Brazil
Telephone	(847) 634 6330	++55 21 203 2191
Fax	(847) 634 1992	++55 21 263 9288
Emergency Telephone:	(800) 424 9300	++55 21 263 7292
Supplier	PURAC biochem Arkelsedijk 46 NL-4206 AC Gorinchem The Netherlands	Purac bioquímica Gran Vial 19-25 E 08160 Montmelo Barcelona Spain
Telephone	++31 (0) 183 695695	++34 93 572 1016
Fax	++31 (0) 183 695604	++34 93 568 3955
Emergency Telephone	++31 (0) 183 695695	++34 93 568 6300 (Ext 222)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name of the substance	Sodium-L-(-)-2-hydroxy propionate aqueous solution.
Synonyms	Sodium Lactate, Sodium-L-(-)-2-hydroxy propionate
CAS-No. 867-56-1	EC-No 212-762-3

3. HAZARDS IDENTIFICATION

Most important hazards	May cause eye irritation with susceptible persons.
-------------------------------	--

4. FIRST AID MEASURES

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Move to fresh air.
Skin contact	Wash off with plenty of water.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Ingestion	Drink plenty of water.
Major effects of exposure	May cause eye irritation with susceptible persons.

Copyright © 2000 PURAC. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth or accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions contained herein may be relied upon for any purpose or reason. PURAC disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.

For further information:

PURAC sales office:
PURAC America Lincolnshire, IL / USA Phone +1 847 634 6330 Fax +1 847 634 1992 e-mail
pam@purac.com



SAFETY DATA SHEET

Sodium-L- Lactate, PURASAL®S

REVISION DATE 07/03/00
REF. SD0130/us04

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water, carbon dioxide (CO ₂), foam.
Extinguishing media which must not be used for safety reasons	None.
Specific hazards	Burning produces irritant fumes.
Special protective equipment for firefighters	None.
Specific methods	Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with eyes. Use personal protective equipment.
Environmental precautions	No special environmental precautions required.
Methods for cleaning up	Flush with water.

7. HANDLING AND STORAGE

Handling	
Technical measures/Precautions	No special technical protective measures required.
Safe handling advice	Handle in accordance with good industrial hygiene and safety practice.
Storage	
Technical measures/Storage conditions	Keep tightly closed in a dry place. Avoid long storage times.
Packaging material	Steel and plastic packages.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure	Insure adequate ventilation, especially in confined areas.
Control parameters	None.
Personal protection equipment	
Respiratory protection	Not applicable.
Hand protection	Not applicable.
Eye protection	Safety glasses.
Skin and body protection	Not applicable.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Copyright © 2000 PURAC. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth or accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions contained herein may be relied upon for any purpose or reason. PURAC disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.

For further information:

PURAC sales office:
PURAC America Lincolnshire, IL / USA Phone +1 847 634 6330 Fax +1 847 634 1992 e-mail
pam@purac.com

Sodium-L- Lactate, PURASAL®S

REVISION DATE 07/03/00
REF. SD0130/us04

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	aqueous solution
Color	light yellow
Odor	slight / none
pH	6.5 - 8.5 (10 - 60% aqueous solution) @ 77°F (25°C)
Molecular Weight	not applicable
Boiling point/range	221°F (105°C) (50% solution), 230°F (110°C) (60% solution)
Decomposition temperature	>392°F(200°C)
Autoignition temperature	not applicable
Flash point	not applicable
Explosion limits	not applicable
Density	1320 - 1340kg/m ³ @ 68°F (20°C) (60 % solution)
Solubility	Water solubility: completely soluble
Viscosity	80 - 160 mPa.s @ 68°F (20°C)

10. STABILITY AND REACTIVITY

Stability	Stable at normal conditions.
Materials to avoid	None.
Hazardous decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Health injuries are not known or expected under normal use. LD50/intraperitoneal/rat = 2000 mg/kg LD50/oral/rat = 2000 mg/kg.
Local effects	May cause eye irritation with susceptible persons.
Specific effects	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.
Further information	Natural product in the body.

Copyright © 2000 PURAC. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth or accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions contained herein may be relied upon for any purpose or reason. PURAC disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.

For further information:

PURAC sales office:
PURAC America Lincolnshire, IL / USA Phone +1 847 634 6330 Fax +1 847 634 1992 e-mail
pam@purac.com



SAFETY DATA SHEET

Sodium-L- Lactate, PURASAL®S

REVISION DATE 07/03/00
REF. SD0130/us04

12. ECOLOGICAL INFORMATION

Mobility	Completely soluble in water.
Persistence / degradability	Product is a salt of lactic acid which is readily biodegradable.
Bioaccumulation	Unlikely.
Ecotoxicity	Ecological injuries are not known or expected under normal use.(No effect on Daphnia @ 10g/l.)

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	Can be disposed as waste water, when in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.
Contaminated packaging	Clean container with water. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

US Regulations	TSCA Inventory Status: Y (Sodium Lactate) SARA III: N California Proposition 65: N Carcinogenic status: OSHA: N. NTP: N, IARC: N FDA: GRAS
EU Status	According to National equivalent of EC-Dir. 67/548, as amended, the product does not need to be labeled. EU Food additive (Sodium Lactate E325)

Copyright © 2000 PURAC. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth or accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions contained herein may be relied upon for any purpose or reason. PURAC disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.

For further information:

PURAC sales office:
PURAC America Lincolnshire, IL / USA Phone +1 847 634 6330 Fax +1 847 634 1992 e-mail
pam@purac.com

Sodium-L- Lactate, PURASAL[®]SREVISION DATE 07/03/00
REF. SD0130/us04**16. OTHER INFORMATION****CAS-No.** 72-17-3 (general)**EC-No** 200-772-0 (general)**NFPA Ratings (Scale 0-4)**

0(health)-0(flammability)-0(reactivity)

HMIS Rating

0(health)-0(flammability)-0(reactivity)-A (protective equipment)

Further information on the safety assessment of sodium lactate and lactic acid can be obtained in a CFTA Report of June 6th 1997.

Copyright © 2000 PURAC. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth or accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions contained herein may be relied upon for any purpose or reason. PURAC disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.

*For further information:***PURAC sales office:**

PURAC America Lincolnshire, IL / USA Phone +1 847 634 6330 Fax +1 847 634 1992 e-mail
pam@purac.com