

SAFETY DATA SHEET
2001/58/EC**# Calcium Lactate**Revision Date 26.10.2004
Ref. SD100/2004-03**1. IDENTIFICATION OF THE
SUBSTANCE /
PREPARATION
AND THE
COMPANY /
UNDERTAKING**

Product name	Calcium-L-Lactate, PURACAL®	
Use of the Substance	Mineral supplement, Specialty chemical	
Supplier	PURAC biochem Arkelsedijk 46 NL-4206 AC Gorinchem The Netherlands	PURAC Biochem M. en O. weg 11 NL-9563 TM Ter Apelkanaal The Netherlands
Telephone	+31 183 695695	+31 599 568700
Fax	+31 183 695604	+31 599 568799
Emergency telephone	+31 183 695695	+31 599 568700

**2. COMPOSITION /
INFORMATION ON
INGREDIENTS**

# Chemical name of the substance	Calcium (S)-2-hydroxy propanoate		
# Synonyms	Calcium Lactate Pentahydrate, Calcium Lactate Trihydrate, Calcium Lactate Monohydrate, Calcium L-2-hydroxy propanoate		
# Components	EC-No.	CAS-No.	Weight, %
Calcium lactate	248-953-3	28305-25-1	73 - 95
Water			balance

Hazard classification

The product contains no substances which at their given concentration are considered to be hazardous to health.

3. HAZARDS IDENTIFICATION**Most important hazards**

Health injuries are not known or expected under normal use.

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4. FIRST AID MEASURES

General advice

Show this safety data sheet to the doctor in attendance.
Immediate medical attention is not required

Skin contact

Wash off with water.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids.

Ingestion

Drink water.

Major effects of exposure

May cause eye irritation with susceptible persons. May cause irritation of respiratory tract.

Protection of first-aiders

No hazards which require special first aid measures.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water, carbon dioxide (CO₂), foam.

Extinguishing media which must not be used for safety reasons

None.

Specific hazards

None.

Special protective equipment for firefighters

None.

Specific methods

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid contact with skin and eyes.

Environmental precautions

Prevent further leakage or spillage.
No special environmental precautions required.

Methods for cleaning up

Pick up and transfer to properly labelled containers.
After cleaning, flush away traces with water.

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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 in a dry place.

Keep tightly closed.

Packaging material

Plastic, paper, fibre drums or boxes.

**8. EXPOSURE CONTROLS /
PERSONAL PROTECTION****Engineering measures to reduce exposure**

Ensure adequate ventilation, especially in confined areas.

Control parameters

None.

Personal protection equipment**Respiratory protection**

Effective dust mask.

Hand protection

None.

Eye protection

Safety glasses.

Skin and body protection

None.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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# Form	powder/agglomerate/granular
Colour	white
Odour	slight / none
pH	6 - 8.5 (10% aqueous solution)
Melting point/range	> 200°C
Decomposition temperature	>200°C
Flash point	not applicable
Explosion limits of the pentahydrate	
Max. Explosion overpressure: 5.1 bar	Min. Ignition energy: > 8700 mJ
Max. pressure increase rate: 105 bar/s	Min. Ignition temperature: 610°C
Explosion Class: ST 1	Dust explosion constant: 29 bar. m/s
Bulk density	300 - 500 kg/m ³
Solubility	Water solubility: 7-9g /100g water @ 25°C

10. STABILITY AND REACTIVITY

Stability
Stable at normal conditions. Hazardous polymerisation does not occur.

Materials to avoid
Strong oxidising agents.

Hazardous decomposition products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Health injuries are not known or expected under normal use.
LDLo: 140 mg/kg (ivn-mus)

Long term toxicity
Did not show carcinogenic effects in animal experiments. 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 salts.

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12. ECOLOGICAL INFORMATION

Mobility

Completely soluble.

Persistence / degradability

Product is a salt of lactic acid which is readily biodegradable.

Bioaccumulation

None.

Ecotoxicity

Ecological injuries are not known or expected under normal use.

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.

Further information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

The product does not need to be labelled in accordance with EC directives or respective national laws.

EC Food additive: E 327

USA FDA/GRAS Status.

German Water Hazard Class (WGK): 1

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16. OTHER INFORMATION

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

Additional data on the calculated ecotoxicity of lactic acid and its salts and esters can be obtained in a report entitled 'The ecotoxicity and biodegradability of lactic acid, alkyl lactate esters and lactic acid salts' by Bowmer et al. (Reference: Chemosphere 37: 1317-1333 (1998))

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Indicates updated section.

For further information:

<http://www.purac.com/>