

SAFETY DATA SHEET
2001/58/EC**Lactic Acid Powder**Revision Date: 11/08/05
Ref. SD215/2005-03**1. IDENTIFICATION OF THE
SUBSTANCE /
PREPARATION
AND THE
COMPANY /
UNDERTAKING**

Product name	PURAC [®] Powder 55 PURAC [®] Powder 60 PURAC [®] Powder 60 / NS PURAC [®] Powder 55 / NS
Use of the Preparation	Food additive, Specialty chemical
Supplier	PURAC biochem Arkelsedijk 46 NL-4206 AC Gorinchem The Netherlands
Telephone	+31 183 695695
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**2. COMPOSITION /
INFORMATION ON
INGREDIENTS****Chemical nature of the preparation** (S)-Lactic Acid solid adduct with Calcium (S)-Lactate and (silicon dioxide).**Synonyms** L(+)-Lactic Acid Powder
2-hydroxy propanoic acid powder

Components	EC-No.	CAS-No.	Weight, %	Classification
(S)-Lactic Acid	201-196-2	79-33-4	53-62	Xi, R41, R38
Calcium (S)-Lactate	248-953-3	28305-25-1	34-44	None
Silicon Dioxide			0-3	None
Water				Balance

For the full text of the R phrases mentioned in this Section, see Section 15.

3. HAZARDS IDENTIFICATION**Most important hazards**
Irritating to eyes.**Classification**
Xi, R38 and 41

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4. FIRST AID MEASURES**General advice**

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

Inhalation

Move to fresh air.

Skin contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

Ingestion

Drink plenty of water.

Protection of first-aiders

Wear personal protective equipment.

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

Burning produces irritant fumes.

Special protective equipment for firefighters

Wear personal protective equipment.

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

Neutralize with lime milk or soda ash and flush with plenty of water.

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Avoid temperatures above 200°C.

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.

Packaging material

Stainless Steel or plastic containers.

**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

Rubber gloves. Break through time > 8 hours.

Eye protection

Face-shield.

Skin and body protection

Lightweight protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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PROPERTIES

General Information	
Form	powder
Colour	white/light yellow
Odour	characteristic
Important Health Safety and Environmental Information	
pH	3 - 4 (10% aqueous solution)
Decomposition temperature	>200°C
Flash point	not applicable
Autoignition temperature	none
Explosion limits	not applicable
Bulk density	no data available
Solubility	Water solubility: partly soluble
Other information	
Melting point/range	no data available

10. STABILITY AND
REACTIVITY

Stability	Stable at normal conditions. Hazardous polymerisation does not occur.
Conditions to avoid	Avoid temperatures above 200°C.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapours.

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LD50/oral/rat = 3730 mg/kg (Lactic Acid).

Local effects

Irritating to eyes.

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

As an important metabolite in man, animals and plants, it is naturally formed and metabolised.

12. ECOLOGICAL INFORMATION**Mobility**

Partly soluble in water.

Persistence / degradability

Taking into consideration the properties of the components, the product is estimated to be readily biodegradable according to OECD classification.

Bioaccumulation

None.

Ecotoxicity

Ecological injuries are not known or expected under normal use.

Predicted EC50/48h/daphnia = 1081 -3010mg/l (cation), = 5883-16327mg/l (lactate ion)

Predicted EC50/72h/algae >100 mg/l (cation), > 100mg/l (lactate ion)

Predicted LC50/96h/Fish = 3000mg/l (cation), =16.5 mg/l (lactate ion)

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.

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**14. TRANSPORT
INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**15. REGULATORY
INFORMATION**

The product is classified as dangerous in accordance with Directive 1999/45/EC.

Symbol Xi - Irritant**R -phrases** R38- Irritating to skin.
R41- Risk of serious damage to eyes.**S -phrases** S26 - In case of contact with eyes, rinse immediately with plenty of
water and seek medical advice.
S39 - Wear eye/face protection.

Lactic Acid (E 270) and Calcium Lactate (E327) comply with several Food Regulations.

German Water Hazard Class (WGK): 1

16. OTHER INFORMATIONFurther information on the safety assessment of lactic acid and its salts can be obtained in a
CFTA Report of June 6th 1997.This information only concerns the above mentioned product and is not valid if the product is 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.
