

## TECHNICAL DATA SHEET

# Lactobionic Acid

### Chemical Properties

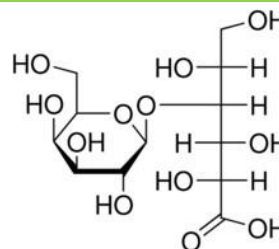
CAS No.: 96-82-2

INCI name: Lactobionic Acid

EINECS No.: 202-538-3

Chemical Formula:  $C_{12}H_{22}O_{12}$

Molecular Weight: 358.30



### Description

Lactobionic acid, 4-O- $\beta$ -galactopyranosyl-D-gluconic acid contains gluconic acid and galactose and can be formed by oxidation of lactose, a disaccharide. The carboxylate anion of lactobionic acid is known as lactobionate.

### Solubility

Freely soluble in water, slightly soluble in glacialacetic acid, in anhydrous ethanol and in methanol.

### Specification

Appearance	Almost white crystalline powder
PH	1.0-3.0
Residue on Ignition	Max 0.3%
Specific Rotation	+23.0 to +29.0°, C=5,H <sub>2</sub> O
Heavy Metals(Pb)	Max 10ppm
Arsenic(As <sub>2</sub> O <sub>3</sub> )	Max 2ppm
Chloride	Max 0.035%
Water	Max 5.0%
Sulfate	Max 500ppm
Calcium	Max 500ppm
Reducing sugar	Max 0.2%
Assay	98.0-102.0 %
Endotoxin Level	Max 10EU/g
Aerobic organisms	Max 100Col/g
<i>Salmonella</i>	Negative
<i>E.Coli</i>	Negative
<i>Pseudomonas aeruginosa</i>	Negative

### Ingredients

Pure Lactobionic Acid

### Labeling

In the United States and the European Union:Lactobionic Acid98.0%



## Applications

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- 1) Lactobionic acid is mainly used in preservation solutions for organ transplantation. It is used to produce erythromycin lactobionate.
- 2) Lactobionic acid can be used in the cosmetics industry as an antioxidant, and in the pharmaceutical industry as a salt form; for example, the antibiotic erythromycin is used as the salt erythromycin lactobionate when intravenously delivered.

## Safety

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This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

## Handling recommendations

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Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store in a cool, dry place. Keep container closed when not in use.

## Packaging, Storage & Shelf Life

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Package	25kg/drum
Storage	Store in a well-closed container away from moisture and direct sunlight.
Shelf Life	2 years if sealed and stored properly.