

## Certificate of Analysis

Item No.	11003400
Batch No.	20230929
Quantity	1000kg
Manufacturing Date	Sep.29, 2023
Expire Date	Sep.28, 2025
Date of Analysis	Oct.08, 2023

### SpecKare<sup>®</sup> LBA

(Lactobionic Acid)

Renewed on Sep.26 2021

Items	Specification	Results
Appearance	White or almost white crystalline powder	White crystalline powder
Identification	-By IR: Positive -By TLC: Positive	Positive Positive
Specific optical rotation	+23°~+29°	+24.0°
Solubility	Freely soluble in water, slightly soluble in glacial acetic acid, anhydrous ethanol and in methanol	Freely soluble in water, slightly soluble in glacial acetic acid, anhydrous ethanol and in methanol
Appearance of solution	The solution is clear & not more intensely coloured than reference solution	The solution is clear & not more intensely coloured than reference solution
pH (10%)	1.0-3.0	2.3
Calcium	≤500ppm	<500ppm
Chloride	≤500ppm	<500ppm
Sulfate	≤500ppm	<500ppm
Iron	≤100ppm	<100ppm
Reducing sugars	≤0.2%	<0.2%
Water Content	≤5.0%	1.2%
Assay	98.0%-102.0%	100.1%