

Certificate of Analysis

Date of Testing: 2023-04-06 21:16:57

Date of Next Testing: 2027-04-05 21:16:57

Product Name: **α -Lactose monohydrate**

CAS Number: 5989-81-1

Specifications & Purity: USP grade

Lot #: D2303496

SKU #: L102282

Analysis: 026891

Parameter	Limit Values	Result
Microbial contamination	0-100 (cfu/g)	10.50 cfu/g
Ignition Residue	0-0.1 (%)	0.05 %
Acidity(0.1 N NaOH)	0-0.4	0.20
Water by Karl Fischer	4.5-5.5 (%)	5.00 %
Loss on drying	0-0.5 (%)	0.22 %
Heavy metals	0-5 (ppm)	0.25 ppm
Specific Rotation $[\alpha]_{20/D}(c=10 \text{ in } H_2O+0.2ml6N \text{ NH}_3)$	54.4-55.9 (°)	54.45000°
UV Absorbance 400nm,1%	0-0.04	0.00200
UV Absorbance 300nm,1%	0-0.07	0.00700
UV Absorbance 270nm,1%	0-0.07	0.01200
UV Absorbance 220nm,1%	0-0.25	0.03000
UV Absorbance 210nm,1%	0-0.25	0.04900
Appearance (L102282)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Enterobacteriaceae	none detected	none detected
Escherichia Coli	none detected	none detected
Identification	pass	Pass
Particle size	Pass	Pass
Salmonella	none detected	none detected
solution (colorless clear liquid,1g/10ml boiling water)	Pass	Pass



ALADDIN SCIENTIFIC CORPORATION

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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su
QA & QC Manager