

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-12-09 10:03:52

Date of Next Testing: 2026-12-08 10:03:52

Product Name: **L-Rhamnose monohydrate**

CAS Number: 10030-85-0

Specifications & Purity: 99%

Lot #: L2202500

SKU #: **R108982**

Analysis: **151665**

Parameter	Limit Values	Result
Heavy metal (as Pb)	0-5 (ppm)	2.20 ppm
Water by Karl Fischer	9-11 (%)	10.29 %
Calcium(Ca)	0-10 (ppm)	5.00 ppm
Ignition Residue (as sulfate)	0-0.15 (%)	0.07 %
Purity(HPLC)	99-100 (%)	99.41000 %
Melting point	91-96 (°C)	95.97000 °C
Specific Rotation [α] ₂₀ /D(c=4 in H ₂ O)	7.5-8.5 (°)	7.51°
Appearance (R108982)	White or light yellow crystalline powder	White or light yellow crystalline powder
Proton NMR spectrum	Conforms to structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager