



XI'AN GREEN SPRING TECHNOLOGY CO., LTD.

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## CERTIFICATE OF ANALYSIS

**Product Name:** D-Mannose  
**Description:** White crystals or crystalline powder  
**Identification:** Passes all criteria tests  
**Batch No.:** 231113GS  
**Manufacturing Date:** Nov 13, 2023  
**Expiry Date:** Nov 13, 2023  
**Batch quantity:** 900kgs  
**Analysis Date:** Nov 29, 2023

Item	Specification	Results
Assay (By HPLC)	$\geq 99.00\%$	99.32%
Identity by IR	Correspond to the IR spectrum of reference substance	Correspond to the IR spectrum of reference
Melting Point	126°C-134°C	129.3°C-131.5°C
Loss on drying	$\leq 0.50\%$	0.20%
Residue on Ignition	$\leq 0.10\%$	0.08%
Specific Rotation	+13.3° ~ +14.3°	+13.4°
Heavy Metals	$\leq 10\text{ppm}$	Complies
Arsenic (As)	$\leq 1\text{ppm}$	Complies
Lead (Pb)	$\leq 1\text{ppm}$	Complies
Cadmium (Cd)	$\leq 0.5\text{ppm}$	Complies
Mercury (Hg)	$\leq 0.5\text{ppm}$	Complies
<b>Microbial Test</b>		
Total microbacterial count	$\leq 1000\text{cfu/g}$	Complies
Total Yeast & Mold	$\leq 100\text{cfu/g}$	Complies
Salmonella	Negative	Complies
Escherichia coli	Negative	Complies

**Storage:** Preserve in tight, light-resistant containers at 10°C~30°C. Keep away from strong light and heat.

**Packing:** 25kg/barrel, double plastic-bag inside, fiber drum outside.

**Shelf:** 2 year when properly stored.

