



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.: 231125
Manufacturing Date: Nov 26, 2023
Expiry Date: Nov 25, 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
Microbial Test		
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.

