



Hongda
Phytochemistry

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Headquarter: 1932 S Lynx Place, Ontario, CA 91761,US

Factory: No.2, Hongda Industrial District, Dacheng, Sanyuan, Xianyang, Shaanxi,China.

USA Warehouse: 1932 S. Lynx PL, Ontario, CA 91761,US

NJ Warehouse: 52 Butler Street, Unit A Elizabeth, NJ 07206

Certificate of Analysis

D-Mannose 99% HPLC

Batch No.	GLT-201025	Manufacturing Date	10/25/2020
Batch Quantity	2000KG	Expiration Date	10/24/2023
Appearance	White crystalline powder	Country of Origin	China
Sterilization Method	Heat NON-IRR	CAS No.	3458-28-4
ITEMS	SPECIFICATION	RESULT	METHOD
Content	D-Mannose≥99%	99.22%	HPLC USP<621>
Identification	Positive	Conform	FTIR

PHYSICAL CHARACTERISTICS

Particle Size	≥ 60% through 20 mesh	Conform	Analytical sieving USP <786>
Particle Size	≥ 25% through 60 mesh	Conform	Analytical sieving USP <786>
Particle Size	≥ 10% through 100 mesh	Conform	Analytical sieving USP <786>
Odor	Odorless to slightly sweet to sweet odor	Conform	Organoleptic
Loss on Drying	≤ 0.5%	0.08%	USP <731>
Residue on Ignition	≤ 0.1%	0.04%	USP <281>
Melting Point	126.0°C-134.0°C	128°C-130°C	USP <741>
Optical Rotation	+13.3° ~ +14.3°	+13.8°	USP <781>
Bulk Density	0.25 – 0.60 g/mL	0.43g/mL	USP <616> Method I
Tapped Density	0.45 – 0.80 g/mL	0.57g/mL	USP <616> Method I

CHEMICAL CHARACTERISTICS

Pesticide Residue	Meet the requirements	Conform	GC USP <561>
Heavy Metals(as Pb)	NMT 10ppm	Conform	USP <231> Method II
Arsenic (As)	NMT 1ppm	ND (<0.1ppm)	ICP-MS
Lead (Pb)	NMT 1ppm	ND (<0.1ppm)	ICP-MS
Cadmium(Cd)	NMT 0.5ppm	ND (<0.1ppm)	ICP-MS
Mercury(Hg)	NMT 0.5ppm	ND (<0.1ppm)	ICP-MS

MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT1,000cfu/g	10cfu/g	USP<61>
Total Yeast & Mold	NMT100cfu/g	< 10cfu/g	USP<61>
E.Coli	Not Detected in(g) 10	Not Detected	USP<61>
Salmonella	Not Detected in(g) 25	Not Detected	USP<61>
Staphylococcus	Not Detected in(g) 10	Not Detected	USP<61>

Packing and Storage Polyethylene bag with cardboard drum. 25kg net.
Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Tested by: *Tracy Cui*

Date: 11/05/2020

Approved by: *Jack Joa*

Date: 11/05/2020