

Specification Sheet

D-Mannose

Product Name:	D-Mannose	Country of Origin:	China
Irradiation Status:	Non-Irradiated	Solvents:	Ethanol and Water

Analysis	Specification	Method
Assay	≥ 99.0%	HPLC
Appearance	White crystalline powder	Visual
Odor	Characteristic	Organoleptic
Identification	Positive	FTIR
Melting Point	126 – 134 °C	USP40-NF35<741>
Optical Rotation	+13.3°– +14.3°	USP40-NF35<781>
Powder Size	≥ 95% through 80 mesh	USP #80 Sieve
Bulk Density	0.30 – 0.50 g/mL	USP40-NF35<616>
Tapped Density	0.45 – 0.75 g/mL	USP40-NF35<616>
Solubility	Clear and colorless	H2O, 10%
Loss on Drying	≤ 1%	USP40-NF35<731>
Residue on Ignition	≤ 0.1%	USP40-NF35<281>
Pesticide Residues	USP<561>	USP40-NF35<561>
Total Heavy Metals	≤ 10 µg/g	USP40-NF35<231>
Arsenic (As)	≤ 1.0 µg/g	ICP-MS
Cadmium (Cd)	≤ 0.5 µg/g	ICP-MS
Lead (Pb)	≤ 1.0 µg/g	ICP-MS
Mercury (Hg)	≤ 0.5 µg/g	ICP-MS
Total Plate Count	≤ 1,000 cfu/g	USP40-NF35<2021>
Molds and Yeasts	≤ 100 cfu/g	USP40-NF35<2021>
Salmonella	Negative	USP40-NF35<2021>
E. Coli	Negative	USP40-NF35<2022>
Staphylococcus aureus	Negative	USP40-NF35<2022>
Aflatoxins	≤ 20 ppb	USP40-NF35<561>

Approved By: Brandon Delgado Date: February 21, 2025