

QUALITY SPECIFICATION

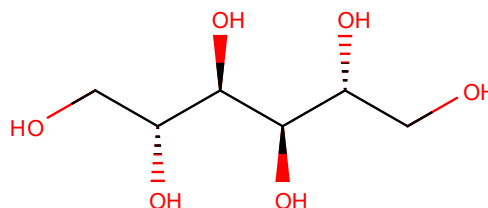
D-Mannitol

Catalog No.: NST-10-104

CAS No.: 69-65-8

Molecular formula: C₆H₁₄O₆

MW: 182.17



No.	Parameter	Specification	Method
1.	Appearance	Crystalline powder	Visual
2.	Color	White	Visual
3.	Identification	Conforms	TLC
4.	Solubility	Freely soluble in water; soluble in alkaline solutions; slightly soluble in pyridine; very slightly soluble in ethanol; practically insoluble in ether	In house
5.	Assay	≥98.0%	HPLC
6.	Odor	Characteristic	Organoleptic
7.	Taste	Characteristic	Organoleptic
8.	Sulfated ash	≤0.2 %	In house
9.	Loss on drying	≤0.5 %	In house
10.	Mesh size/sieve	NLT 95% pass 80 mesh	80 mesh
11.	Specific rotation	+23.3 to +24.3	Polarimeter
12.	Melting point	165°C-170°C	Melting point apparatus
13.	Sorbitol	≤2.0 %	HPLC

14.	Maltitol&Isomaltitol	≤2.0 %	HPLC
15.	Solvent residues	USP<467>	GC
16.	Unspecified impurity	≤0.1 %	HPLC
17.	Total impurities	≤2.0 %	HPLC
18.	Reducing sugars	≤0.1 %	HPLC
19.	Heavy Metals	≤10 ppm	ICP-MS
20.	Lead	≤2 ppm	ICP-MS
21.	Arsenic	≤1 ppm	ICP-MS
22.	Mercury	≤0.1 ppm	ICP-MS
23.	Cadmium	≤1 ppm	ICP-MS
24.	TPC	Not more than 10 ³ CFU/g	ISO 6579:2002
25.	TYMC	Not more than 10 ² CFU/g	ISO 6579:2002
26.	<i>Escherichia Coli</i>	Absent	ISO 6579:2002
27.	<i>Salmonella</i>	Absent	ISO 6579:2002
28.	<i>Staphylococcus aureus</i>	Absent	ISO 6579:2002

Storage: store in a cool & dry place, keep away from strong light and heat

Stability: 24 months when properly stored