



Technical Data Sheet

Format no: RDM/TD/S-04

Revision: 01 / 2024

D-Mannitol

RDM-S-04

Principle: Mannitol a naturally occurring six-carbon sugar alcohol. It is utilized as a nutrient in many bacteriological media. The microorganisms have capability to ferment mannitol to produce energy, acids. In fermentations, simple organic end products are formed from the anaerobic dissimilation of mannitol. The complete hydrolysis of mannitol yields sufficient energy for microbial growth. Since mannitol is used as carbon and energy source in many dehydrated media.

Use: Recommended for media ingredient of basic, selective or differential media and used as carbohydrate source in biochemical characterization of microorganisms etc.

Quality Control

Appearance	White colored, crystals or powder or powder free flowing with dry lumps
Solubility (2%)	Soluble in distilled water
Clarity	No visual color solution
Loss on drying	NMT 0.5 %
Residue on ignition	NMT 0.1 %

Bacteriological testing Bacteriological tests are carried out as per USP 32, NF26 where respective medium is prepared by using mannitol under test.

Test for pathogens:

Total Plate Count	NMT 10000 cfu per gram.
Yeast & Molds	Absent per 10 grams
<i>Escherichia coli</i>	Absent per 10 grams
<i>Salmonella</i>	Absent per 10 grams
<i>Staphylococcus aureus</i>	Absent per 10 grams

Culture response: The carbohydrate fermentation reactions after an anaerobic incubation of 18-48 hours at 33-37°C, of various bacteria with Mannitol.

Organism	ATCC	Growth	Acid production
<i>Staphylococcus aureus</i>	25923	Luxurious growth	Yellow color positive reaction

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label.

Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes used, unusable or modified preparation of this product must be disposed after autoclaving or incineration after completion of task.

Disclaimer

The information contained in the technical data sheet is to the best of our knowledge is accurate and true based on the research and development work carried out by **ReadyMED®**, Chaitanya Agro Biotech, Malkapur, Maharashtra. The products are neither intended for any therapeutic use for animal or human nor for any other *in-vivo* applications. The **ReadyMED®** products are only meant to be used for the laboratory, diagnostic, research, or further manufacturing purpose only. These technical outcomes should not be considered as the warranty of any

kind expressed or implied, and no liability is accepted for infringement of any patent.

CHAITANYA AGRO BIOTECH PVT. LTD.

An ISO 11133:2014, ISO 13485:2016, ISO 9001:2015 ॐ, CIN NO.: U24210MH1995PTC095220S,
S. No. 120/2, Laxmi Nagar, Umbarnala Road, Malkapur-443101, Dist.: Buldana (M.S.) India. Customer Care +91-8669083859
rdmsales@chaitanyagroupindia.com, mkt.cabt@chaitanyagroupindia.com, www.chaitanyagroupindia.com