

TMB 042 – LACTOSE (Monohydrate)

REF NO: TBL/QA/SS/LC/TMB 042	STANDARD SPECIFICATION FOR LACTOSE (Monohydrate)	Rev. No: 03
Issue No: 04		Review Date: 06/02/2025
Issue Date: 07/02/2022		Product code: TMB 042

PRODUCT PROPERTIES

C.A.S Number	64044-51-5
Chemical Formula	$C_{12}H_{22}O_{11} \cdot H_2O$
Formula weight	360.31
Functional Uses	D-Lactose is used for the culture of lactic acid metabolizing bacteria, lactic acid bacteria. D-Lactose is used to identify and characterized galectins.
Standard Packaging	500 gm. & 5 kg

PHYSICAL PARAMETERS

PRODUCT PARAMETER	SPECIFICATION
Appearance	White crystalline powder, Odorless.
Solubility	Freely soluble in water.
Clarity	Clear Solution

CHEMICAL PARAMETERS

PRODUCT PARAMETER	SPECIFICATION
pH (0.5M in H_2O , 25°C)	4.0 – 6.0
Residue on ignition	NMT – 0.05%
Specific rotation	+53±1°
Chloride (Cl)	NMT – 0.005%
Sulphate (SO_4)	NMT – 0.005%
DNase	None detected
RNase	None detected
Assay	NLT – 99.5%

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

