

RM565 Lactose monohydrate, Bacteriological grade

Product Number	Packing
RM565	: 500G

Product Information

Product Code	: RM565
Product Name	: Lactose monohydrate, Bacteriological grade
Synonym	: 4-O-β-D-Galactopyranosyl-D-glucose; Milk sugar
Molecular Formula	: C ₁₂ H ₂₂ O ₁₁ .H ₂ O
Molecular Weight	: 360.31
CAS No.	: 64044-51-5
EC No.	: 200-559-2
HS Code	: 1702 11 00
Shelf Life	: 4 years

Technical Specification

Appearance	: White yellowish-white crystals or powder
Solubility	: 100 mg soluble in 1 mL of boiling water
Clarity	: 1% w/v aqueous solution is clear, without any haziness
pH (2% in water at 25°C)	: 4.00 - 6.00
Cultural response	: Cultural response observed after an incubation at 35-37°C for 18-24 hours by preparing Phenol Red Lactose Broth (M275), using 0.5% of Lactose monohydrate, Bacteriological grade as an ingredient.

Organisms (ATCC)	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Escherichia coli</i> ATCC 25922	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Proteus vulgaris</i> ATCC 13315	luxuriant	negative reaction, no colour change	negative reaction
<i>Serratia marcescens</i> ATCC 8100	luxuriant	negative reaction, no colour change	negative reaction
<i>Salmonella Typhi</i> ATCC 6539	luxuriant	negative reaction, no colour change	negative reaction
<i>Salmonella phimurium</i> ATCC 14028	luxuriant	negative reaction, no colour change	negative reaction
<i>Shigella flexneri</i> ATCC 12022	luxuriant	negative reaction, no colour change	negative reaction

Chemical Analysis:

Chloride (Cl)	:	<= 0.05%
Calcium (Ca)	:	<= 0.001%
Heavy metals (as Pb)	:	<= 0.0005%
Iron (Fe)	:	<= 0.0005%
Sulphate (SO ₄)	:	<= 0.05%
Specific rotation [α 20/D]	:	+52.00 to +54.00° (c = 10% in water)
Assay (HPLC)	:	min. 99.50 %

Risk and Safety Information

WGK	:	3
Storage Temperature(°C)	:	Store below 30°C

Transport Information

Marine Pollutant	:	No
ADR/RID	:	Not Dangerous Goods
IMDG	:	Not Dangerous Goods
IATA	:	Not Dangerous Goods