

## RM565G Lactose monohydrate, Sterile

Product Number	Packing
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RM565G	: 500G
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### Product Information

Product Code	: RM565G
Product Name	: Lactose monohydrate, Sterile
Synonym	: 4-O-β-D-Galactopyranosyl-D-glucose; Milk sugar
Molecular Formula	: $C_{12}H_{22}O_{11} \cdot H_2O$
Molecular Weight	: 360.31
CAS No.	: 64044-51-5
EC No.	: 200-559-2
HS Code	: 1702 11 00
Shelf Life	: 2 years

### Technical Specification

Appearance	: Pale yellow fine powder.
Consistency	: Free flowing powder
Solubility	: 10% in boiling water gives clear solution.
Clarity	: 10% w/v aqueous solution is clear.
Reaction	: Reaction of 2% w/v aqueous solution at 25°C.
pH	: 4.00 - 6.00
Sterility Testing	: No growth is observed after 14 days for Bacteria at 30-35°C and for fungi at 20-25°C.

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, sterile 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> ATCC13048	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</i> Typhi ATCC 6539	luxuriant	negative reaction ,no colour change	negative reaction
<i>Salmonella</i> Typhimurium ATCC 14028	luxuriant	negative reaction ,no colour change	negative reaction
<i>Shigella flexneri</i> ATCC 12022	luxuriant	negative reaction ,no colour change	negative reaction
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant	negative reaction ,no colour change	negative reaction
<i>Staphylococcus aureus</i> ATCC 25923	luxuriant	negative reaction ,no colour change	negative reaction
<i>Bacillus subtilis</i> ATCC 6633	luxuriant	negative reaction ,no colour change	negative reaction
<i>Candida albicans</i> ATCC 10231	luxuriant	negative reaction ,no colour change	negative reaction
<i>Aspergillus brasiliensis</i> ATCC 16404	luxuriant	negative reaction ,no colour change	negative reaction
<i>Clostridium sporogenes</i> ATCC 11437	luxuriant	negative reaction ,no colour change	negative reaction

**Chemical Analysis:**

FTIR	:	Matches with the standard pattern
Sulphated ash	:	<= 0.1%
Water (K.F.)	:	4.50 - 5.50%
Assay (GC/HPLC)	:	98.00 - 102.00%
Chloride (Cl)	:	<= 0.05%
Calcium (Ca)	:	<= 0.001%
Heavy metal (as Pb)	:	<= 0.0005%
Iron (Fe)	:	<= 0.0005%
Sulfate (SO <sub>4</sub> )	:	<= 0.05%

**Risk and Safety Information**

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

**Transport Information**

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