TM 942 – BACILLUS MEDIUM (DOUBLE PACK)

INTENDED USE

For cultivation of Bacillus licheniformis.

PRODUCT SUMMARY AND EXPLANATION

Bacillus licheniformis is a gram-positive, spore-forming soil bacterium that is used in the biotechnology industry to manufacture enzymes, antibiotics, biochemicals and consumer products. This species is closely related to the well-studied model organism Bacillus subtilis, and produces an assortment of extracellular enzymes that may contribute to nutrient cycling in nature. Bacillus Medium is recommended by ATCC as a cultivation and maintenance medium for Bacillus licheniformis ATCC No. 9945a (1). This medium is a slight modification of Thorne Medium (2, 3), recommended for cultivation of Bacillus licheniformis

COMPOSITION

Ingredients	Gms / Ltr
Part I	
L-Glutamic acid	4.00
Citric acid	2.00
Dipotassium hydrogen phosphate	0.500
Ferric ammonium citrate	0.500
Magnesium sulphate	0.500
Part II	
Glycerol	20.000

PRINCIPLE

Bacillus medium contains glycerol, which provides carbon and energy for the growth of bacteria. Glutamic acid and ferric ammonium citrate act as source of nitrogen. Dipotassium phosphate and citric acid provide necessary nutrients along with buffering action.

INSTRUCTION FOR USE

- Dissolve 7.5 grams of Part I in 980 ml of distilled water and add 20 grams of Part II.
- Gently heat to boiling with gentle swirling and dissolve the medium completely.
- Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	White to cream homogeneous free flowing powder
Appearance of Prepared medium	:	Dark amber colour, clear solution may contain a slight precipitate.
pH (at 25°C)	:	7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth
Bacillus cereus	10876	50-100	Luxuriant
Bacillus licheniformis	9945	50-100	Luxuriant

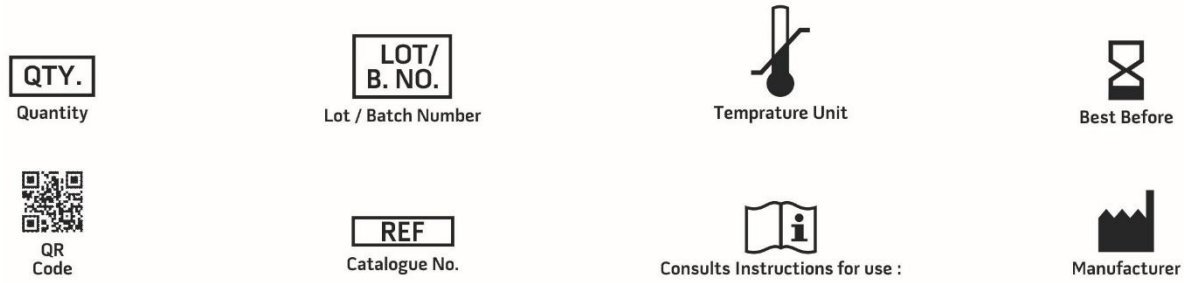
PACKAGING:
In 500 gm, 100 gm packaging size.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Rey M. W. et al, 2004, Genome Biol., 2004, 5(10)
2. Catalogue of Bacteria and Bacteriophages, 1992, 18th Edition, American Type Culture Collection.
3. Thorne C.B., 1954, J. Bacteriol., 68:307.
4. Atlas R.M. 2004, 3rd Ed., Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton.



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

***For Lab Use Only**
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