TM 018 – ANTIBIOTIC ASSAY MEDIUM NO. 6

INTENDED USE
For induction of spore production in *Bacillus subtilis* strains used in antibiotic assay.

PRODUCT SUMMARY AND EXPLANATION
Antibiotic Assay media are used in the performance of antibiotic assays. Grove and Randall have elucidated those antibiotic assays and media in their comprehensive treatise on antibiotic assays. Schmidt and Moyer have reported the use of antibiotic assay medium for the liquid formulation used in the performance of antibiotic assay. These media are prepared as per FDA.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Sodium chloride	5.000
Dextrose (Glucose)	2.500
Dipotassium hydrogen phosphate	2.500
Manganese sulphate	0.030

PRINCIPLE
Tryptone and Soya peptone provides the nutrients and growth factors. Dextrose provides as energy source. Dipotassium hydrogen phosphate provides the buffering system. Manganese sulphate helps in the early initiation of *Bacillus* species.

INSTRUCTION FOR USE
- Dissolve 30.03 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear solution may contain slight precipitate.
pH (at 25°C) : 7.0±0.2

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Spores	Incubation Temperature	Incubation Period
Bacillus cereus	10876	50-100	Luxuriant	Positive	30°C	6 Days

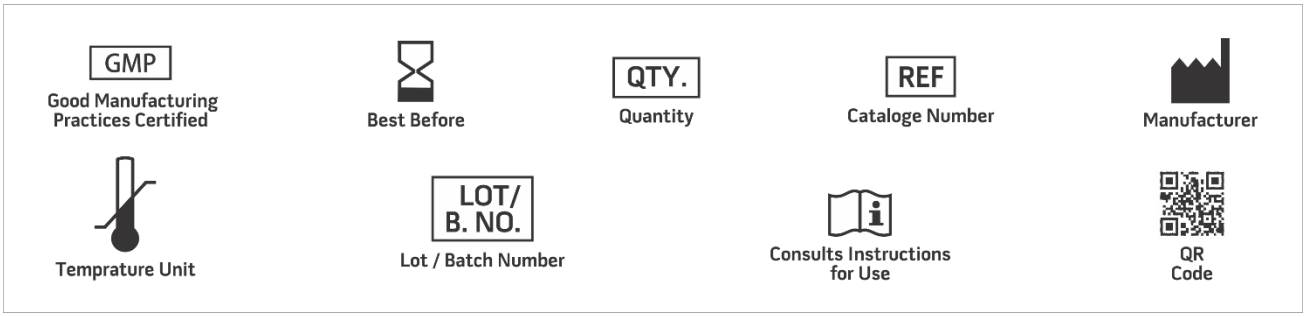
Bacillus stearothermophilus	7953	50-100	Luxuriant	Positive	55°C	6 Days
Bacillus subtilis subsp. spizizenii	6633	50-100	Luxuriant	Positive	35°C	6 Days
Bacillus pumilus	14884	50-100	Luxuriant	Positive	35°C	6 Days

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

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

REFERENCES
1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc, New York.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983. Title 21, part 436, Subpart D, Washington, D.C. U.S Government printing office, paragraphs 436, 100-436, 106 pg 242-259 (April 1).
5. Schmidt and Moyer, 1944; J. Bact, 47:199.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
Revision: 08 Nov., 2019