

**ANTIBIOTIC ASSAY MEDIUM NO. 6****TM 018**

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

Composition

Ingredients	Gms/Ltr.
Casein enzymatic hydrolysate	17.00
Sodium chloride	5.00
Papaic digest of soyabean meal	3.00
Dextrose	2.50
Dipotassium phosphate	2.50

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct sunlight.

Instructions for Use

Dissolve 30.00gms in 1000 ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

Appearance: Light amber colour, clear solution

pH (at 25°C): 7.0 ± 0.2

Principle

ANTIBIOTIC ASSAY MEDIUM No.6 is used for induction of spore production in *Bacillus subtilis* strains used in antibiotic assay. Medium composition is in accordance to the specifications detailed in FDA. Medium contains Casein enzymatic hydrolysate and Papaic digest of soyabean meal which provides the nitrogen, and other growth nutrients. Dextrose provides carbon and energy source. Dipotassium phosphate provides the buffering system. Osmotic equilibrium to maintain cell integrity and viability is provided by Sodium chloride.

Interpretation

Cultural characteristics observed after inoculating (10³CFU/ml) at 25±2°C (pre-incubation), for examined growth transfer to subsequent incubation at specified temperatures for 5 - 6 days.

Microorganisms	ATCC	Inoculum (cfu/ml)	Growth	Incubated at °C	Spores
<i>Bacillus stearothermophilus</i>	7953	10 ³	Luxuriant	55°C	Positive
<i>Bacillus subtilis</i>	6633	10 ³	Luxuriant	35°C	Positive
<i>Bacillus pumilus</i>	14884	10 ³	Luxuriant	35°C	Positive
<i>Bacillus cereus</i>	10876	10 ³	Luxuriant	35°C	Positive

References

- Schmidt and Moyer, 1944; J. Bact, 47:199.
- Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983 Title

PRODUCT DATA SHEET

21, Part 436, Subpart D, Washington, D.C.: U.S. Government Printing Office, paragraphs 436, 100-436, 106, p. 242-259, (April 1).