

# TM 1975 – ANTIMICROBIAL INHIBITOR TEST AGAR

### **INTENDED USE**

For residual analysis of antimicrobial components in meat and organ samples, using Bacillus subtilis.

### PRODUCT SUMMARY AND EXPLANATION

In addition to washing, treatments with antimicrobial compounds such as chlorine and organic acids are used to sanitize muscle foods. Various concentrations and the degree of effectiveness of the concentrations of these antimicrobial compounds have been reported. Antimicrobial Inhibitor Test Agar pH 6.0 is recommended for residual analysis of antimicrobial components in meat and organ samples, using Bacillus subtilis as test organism by agar diffusion procedure and EEC Four-Plate-Test.

# **COMPOSITION**

Ingredients	Gms / Ltr		
Tryptone	3.500		
Meat extract	3.500		
Sodium chloride	5.000		
Agar	13.000		

### **PRINCIPLE**

Antimicrobial Inhibitor Test Agar pH 6.0 contains tryptone and meat extracts which serve as source for carbon, nitrogen and growth factors for the growth of organisms. Sodium chloride helps to maintain osmotic balance in the medium.

# **INSTRUCTION FOR USE**

- Dissolve 25.0 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool to 45-50°C.
- Mix 1 ml of Bacillus subtilis spore suspension per litre of sterile and cooled medium.
- Mix well and pour into sterile Petri plates.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Cream to yellow homogeneous free flowing powder

Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates

pH (at 25°C) : 6.00

# **INTERPRETATION**

Cultural response and zone of inhibition observed after an incubation.

Microorgani sm	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Inhibition zones with Penicillin (10 IU)	Inhibition zones with Streptomycin (10m)	Incubation Temperature	Incubation Period	
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Bacillus subtilis	6633	50-100	Good- luxuria nt	>=50 %	36-48	19-27	30°C using B.subtilis and at 37°C using M.luteus	18-24 Hours
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# **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.

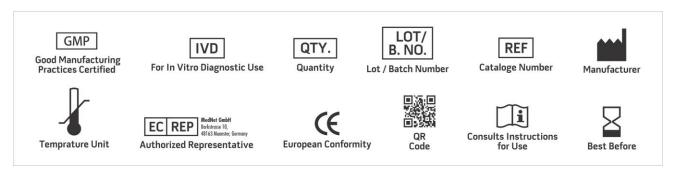
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

# **DISPOSAL**

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

#### REFERENCES

1. Ferrini, A. M.; Mannoni, V., Aurdi P. Combined plate microbal assay (CPMA). Food additives and Contaminants, 23(1);16-24. 2006



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

\*For Lab Use Only

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