TM 496 - YEAST EXTRACT AGAR

INTENDED USE
For plate count of microorganisms in water.

PRODUCT SUMMARY AND EXPLANATION
Yeast Extract Agar is formulated according to the formula described by Windle Taylor for the plate count of microorganisms in water. Water can contain a large number of microorganisms, particularly coming from the earth and vegetation. From the water sample, make a decimal dilution bank with Ringer Solution and take aliquots to 2 parallel series of plates. Pour the molten, cooled (45°C) Yeast Extract Agar and homogenize with sample. Incubate one of the series of plates at 35°C for 24 hours and the other series of plates at 20-22°C for 3 days. Separate counts are made of the organisms forming visible colonies after 24 hours at 35°C and the organisms forming colonies after 3 days at 20-22°C. Select the plates containing 30-300 colonies.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	5.000
Yeast extract	3.000
Agar	15.000

PRINCIPLE
Yeast extract and peptic digest of animal tissue provide nitrogenous compounds, vitamin B complex and other growth nutrients.

INSTRUCTION FOR USE
- Dissolve 23 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- 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 : Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.0±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours

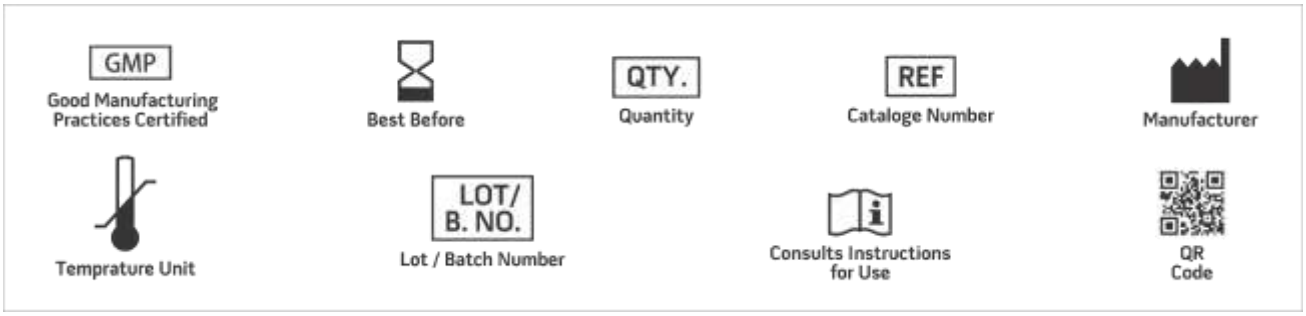
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours

PACKAGING:
In pack size of 100 gm and 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. Taylor W. E., 1958, The Examination of Waters and Water Supplies, 7th Ed., Churchill Ltd, London, pg. 394, 778.
2. 2.Dept. of Health and Social Security, 1982, report No.71: HMSO, London, 54.



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