

Medium used for the enumeration of microorganisms in water.

CONTENTS (Liter)

Peptone	6.0 g
Yeast Extract	3.0 g
Agar	15.0 g
Final pH = 7.2 \pm 0.2 at 25°C.	

PROCEDURE

Suspend 24.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

INTERPRETATION

Yeast Extract Agar is a medium used for the enumeration of microorganisms in water. Peptone and yeast extract provide nitrogen, carbon, amino acids and minerals. Agar is the solidifying agent.

TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 \pm 2°C for 18 - 24 hours or 20 \pm 2°C for 3 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

<u>Dehydrated medium</u> Appearance: free-flowing, homogeneous. Color: beige. <u>Prepared medium</u> Appearance: clear with no precipitate. Color: light amber. Incubation conditions: $35 \pm 2^{\circ}C / 42 - 48$ hours or $20 \pm 2^{\circ}C / 3$ days

Microorganism	ATCC	Inoculum CFU	Growth
Staphylococcus aureus	25923	50-100	good
Escherichia coli	25922	50-100	good
Candida albicans	10231	50-100	good
Aspergillus niger	16404	50-100	good

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

- International Organization for Standardization: 1999. Water Quality Enumeration of culturable microorganisms – Colony count by inoculation in a nutrient agar culture medium. International Standard ISO: 6222.
- 2. Windle Taylor (1958). The Examination of Waters and Waters Supplies. 7th ed. pp 394-398 and 778.

PACKAGE

Cat. No : MB-Y1416 500 G Yeast Extract Agar

