

Tergitol Agar



Medium used for the isolation and identification of coliforms.

• CONTENTS (Liter)

Peptone	10.0 g
Yeast Extract	6.0 g
Meat Extract	5.0 g
Lactose	20.0 g
Bromothymol Blue	0.05 g
Agar	13.0 g
Final pH = 6.9 ± 0.2 at 25°C	

• PROCEDURE

Suspend 54.05 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. Aseptically add 5 mL of TTC 1% supplement (MB-T1867) and 2 vials of Tergitol supplement (MB-T1866). Mix well. Pour into petri dishes.

TTC 1% supplement

1 vial contents

Triphenyltetrazolium Chloride 0.05 g

Tergitol supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Tergitol 7 0.05 mL

• INTERPRETATION

Tergitol Agar is a medium used for the isolation and identification of coliforms. Peptone, yeast extract and meat extract provide carbon, nitrogen, vitamins and minerals. Lactose is the fermentable carbohydrate. Bromothymol blue is the pH indicator. Agar is the solidifying agent. When TTC is added to the medium, it serves as an indicator of bacterial growth; In the presence of TTC, lactose fermenters produce yellow to greenish-yellow colonies with yellow halos, while lactose non-fermenters produce dark red colonies surrounded by blue halos. Tergitol supplement inhibits the growth of most Gram-positive bacteria and swarming of proteus spp.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance : slightly opalescent

Color: light green

Incubation conditions: 36 ± 1°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	yellow colonies with yellow halos
<i>Proteus mirabilis</i>	25933	50-100	good	dark red colonies with blue halos (swarming inhibited)
<i>Salmonella typhimurium</i>	14028	50-100	good	dark red colonies with blue halos
<i>Enterococcus faecalis</i>	29212	≥10 ³	inhibited	-
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited	-

• 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. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Tartoff, K.D., and C.A. Hobbs. (1987). Bethesda Research Laboratories Focus.9: 12.
2. Sambrook, J., E.F. Fritsch, and T. Maniatis. (1989). Molecular cloning: a laboratory manual, 2nd ed.
3. Chapman, G.H. (1947). J. Bact. 53: 504.
4. ISO 9308-1: 2000. Water quality - Detection and enumeration of *Escherichia coli* and coliform bacteria.

• PACKAGE

Cat. No : MB-T1184 Tergitol Agar	500 G
-------------------------------------	-------