

## TMV 440 – TERGITOL - 7 AGAR BASE (VEG.)

### INTENDED USE

For selective isolation and identification of coliform bacteria from water.

### PRODUCT SUMMARY AND EXPLANATION

These media are prepared by completely replacing animal based peptones with vegetable peptones that makes the media free of BSE/TSE risks. Tergitol-7 Veg Media are the modifications of Tergitol-7 Media originally designed by Chapman and later on modified by incorporating 2,3,5-Triphenyl Tetrazolium Chloride (TTC) into the medium. These media are selective and differential and are used for the detection and enumeration of coliform organisms. Pollard has reported the selective bactericidal property of sodium heptadecyl sulphate (Tergitol-7). Kulp et al corroborated the use of Tergitol-7 Agar with TTC in routine analysis of water and Mossel used this medium for the examination of food materials. Tergitol-7 Veg Media like the conventional media can be corroborated with TTC in the routine analysis of water and examination of food materials. Tergitol-7 Veg Agar H is a modification of Tergitol-7 Veg Agar and is used for isolation of enteric bacilli from urine samples.

Lactose fermenting organisms form yellow colonies with yellow zones while *Klebsiella* and *Enterobacter* form greenish colonies. Lactose non fermenters produce blue colonies. TTC is reduced in the bacterial cell to form formazan, a red coloured insoluble complex, thereby producing red coloured colonies. Veg peptone No.3 is a source of nitrogen, amino acids, carbon. Yeast extract provides trace elements, vitamins and amino acids.

### COMPOSITION

Ingredients	Gms / Ltr
Veg peptone No.3	5.000
Yeast extract	3.000
Lactose	10.000
Sodium heptadecyl sulphate	0.100
Bromo thymol blue	0.025
Agar	15.000

### PRINCIPLE

It contains sodium thiosulphate as an indicator of H<sub>2</sub>S production. Tergitol-7 inhibits gram-positive bacteria and *Proteus* swarming and yields better recovery of coliforms. Bromo thymol blue is the pH indicator.

### INSTRUCTION FOR USE

- Suspend 33.13 grams of Tergitol-7 Veg agar 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. Cool to 45 – 50°C.
- Aseptically add 3 ml of 1% 2, 3, 5, Triphenyl Tetrazolium Chloride (TTC) Solution, if desired.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow coloured w/ green tinge, homogenous, free flowing powder.
Appearance of prepared medium	: Green coloured, clear to slightly opalescent gel forms in petri plates, clear solution in tubes.
pH (at 25°C)	: 6.9 ±0.2

### INTERPRETATION



Cultural characteristics observed after incubation with addition of T.T.C. solution 1% (10 ml/vl).

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70%	Yellow	35-37°C	18-48 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	>=70%	Yellow	35-37°C	18-48 Hours
<i>Salmonella serotype Typhimurium</i>	14028	50-100	Luxuriant	>=70%	Blue	35-37°C	18-48 Hours
<i>Shigella flexneri</i>	12022	50-100	Luxuriant	>=70%	Blue	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Inhibited	0%	-	35-37°C	18-48 Hours

**PACKAGING:**

In pack size of 100gm 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. Chapman G. H., 1947, J. Bact., 53:504.
2. Pollard A.L., 1946 Science, 103:758.
3. Kulp W., Mascoli C. and Tavshanjian O., 1953, Am J. Public Health, 43:1111.
4. Mossel D.A.A., 1962, J. Appl.Bact. 25:20.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative	 CE European Conformity	 QR Code	 Consults Instructions for Use	 Best Before



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

**\*For Lab Use Only**  
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