

## TM 895 – TRYPTONE SOYA AGAR W/ MgSO<sub>4</sub> (as per AOAC) (TSAM)

### INTENDED USE

For cultivation of coliforms.

### PRODUCT SUMMARY AND EXPLANATION

The faecal coliform group is restricted to organisms that grow in the gastrointestinal tract of human and warm-blooded animals. It includes members of at least three genera: *Escherichia*, *Klebsiella* and *Enterobacter*. Tryptone Soya Agar with Magnesium Sulphate (TSAM) is used for the enumeration of coliform bacteria by hydrophobic grid membrane filter (HGMF). The membrane filter is imprinted with hydrophobic material in grid pattern. The hydrophobic lines act as barriers to spread the colonies, thereby dividing membrane filter surface into separate compartments of equal and known size.

HGMF membrane filters has pore size of 0.45 mm. For *E.coli*/ coliform counts place HGMF on surface of pre-dried Tryptone Soya Agar with Magnesium Sulphate. Incubate at 25°C for 4-5 hours for dry foods and 4-5 hrs at 35°C for all other foods. The membrane is placed on the surface of other differential / selective medium after pre-incubation on TSAM, to enable detection of coliforms.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	15.000
Peptic digest of animal tissue	5.000
Sodium chloride	5.000
Magnesium sulphate	1.500
Agar	15.000

### PRINCIPLE

Casein enzymic hydrolysate and peptic digest of animal tissue provide the necessary nutrients to the organisms. Sodium chloride maintains osmotic equilibrium while magnesium sulphate enhances maximum recovery of the coliform bacteria on membrane filters.

### INSTRUCTION FOR USE

- Suspend 41.5 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)** : 7.3±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth 35-37°C	Recovery 35-37°C	Growth 44-46°C	Recovery 44-46°C	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70%	Luxuriant	>=70%	22-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	>=70%	Inhibited	0%	22-24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	>=70%	Inhibited	0%	22-24 Hours
<i>Shigella flexneri</i>	12022	50-100	Luxuriant	>=70%	Inhibited	0%	22-24 Hours

**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. Official Methods of Analysis of AOAC International 16th Edition, Vol. 1, 1995.
2. J.AOAC, 1983, 66:897.
3. J.AOAC, 1984, 67:812.

 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 <small>MedNet GmbH Barkstrasse 10, 48163 Muenster, Germany</small>	 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**  
**Revision: 08 Nov., 2019**

