

TM 1109 – TRYPTONE TELLURITE AGAR BASE

INTENDED USE

For selective isolation of pathogens from clinical samples, especially from nose, throat and vagina.

PRODUCT SUMMARY AND EXPLANATION

Tryptone Tellurite Agar was prepared according to the specifications of the Maryland State, Department of Health as a medium for isolation of members of the genus *Corynebacterium*, particularly in the laboratory diagnosis of diphtheria. Pathogenic organisms like *Corynebacterium*, Streptococci are often responsible for infections in throat. These organisms are also more or less responsible for infecting the nasal cavity. Isolation of these organisms is important during diagnosis of fatal infections.

COMPOSITION

Ingredients	Gms / Ltr	
Casein enzymic hydrolysate	10.000	
Peptic digest of animal tissue	10.000	
Sodium chloride	5.000	
Dextrose	2.000	
Agar	20.000	

PRINCIPLE

Casein enzymic hydrolysate and peptic digest of animal tissue present in the medium provide nitrogenous, carbonaceous compound and trace elements. Dextrose is an energy source. Sodium chloride maintains osmotic equilibrium. Potassium tellurite inhibits gram-negative and most gram-positive bacteria except *Corynebacteria* and some *Streptococci*. Serum provides additional growth factors for *Corynebacterium* species.

INSTRUCTION FOR USE

- Suspend 47 grams in 950 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 118-121°C for 15 minutes.
- Cool to around 50-55°C and aseptically add sterile, 10 ml of 1% Potassium Tellurite Solution and 50 ml of sterile sheep, rabbit or human serum.
- 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 opalescent gel forms in Petri plates.

pH (at 25°C) : 7.5±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added Potassium Tellurite Solution and sterile human serum for 24-48 hours.











Corynebacterium diphtheriae	11913	50-100	Luxuriant	>=50%	35- 37°C	24-48 Hours
Escherichia coli	25922	10³	Inhibited	0%	35- 37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	None-poor	<=10%	35- 37°C	24-48 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.

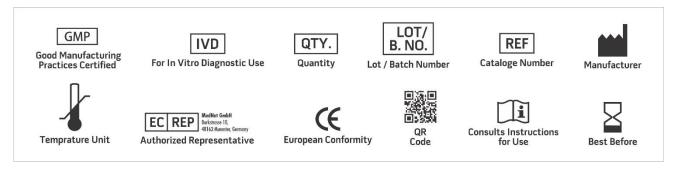
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Albers W. D., 1947, U.S. Naval Med. Bull., 47:33.
- 2.Collee J. G., Fraser A. G., Marmion B. P., Simmons A. (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone.
- 3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.



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

*For Lab Use Only
Revision: 08 Nov., 2019





