

TMV 447 – DIAGNOSTIC THIOGLYCOLLATE MEDIUM W/O INDICATOR (VEG.)

INTENDED USE

A general-purpose medium for the cultivation of microorganisms, especially obligate anaerobes.

PRODUCT SUMMARY AND EXPLANATION

Diagnostic Thioglycollate Medium w/o Indicator (Veg) is prepared by using Veg hydrolysate in place of Casein enzymic hydrolysate which makes it totally free of BSE/TSE risks. Diagnostic Thioglycollate Medium w/o Indicator (Veg) is the modification of the semisolid Thioglycollate medium w/o Indicator originally formulated by Brewer for the growth of aerobic and anaerobic microorganisms. Due to different degree of oxygen required for growth, the obligate aerobes grow at the top of the medium, while anaerobes grow and survive at the bottom of the medium.

This medium is nutritious and favours the growth of *Clostridium butyricum*, *Campylobacter* species, *Bacteroides* species, Pneumococci etc. from minimal inocula. Previously methylene blue was incorporated in the medium as pH indicator but has been omitted as it was reported toxic to few organisms. *Brucella* species which fail to grow in the presence of indicator, can grow in this medium. With addition of 10% v/v serum, this medium can be used for cultivation of fastidious *Trichomonas vaginalis*. Calcium carbonate neutralizes the acid produced during growth and prevents rapid growth and death of gram-negative cocci, *Clostridium perfringens* and other acid-sensitive bacteria. Therefore, Thioglycollate Veg medium can also be used as transportation medium.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	17.000
Papaic digest of soyabean meal	3.000
Dextrose	6.000
Sodium chloride	2.500
Sodium thioglycollate	0.500
L-Cystine	0.250
Sodium sulphite	0.100
Agar	0.700

PRINCIPLE

The medium consists of Veg hydrolysate, Papaic digest of soyabean meal, dextrose which provides nitrogenous and carbonaceous compounds, fermentable carbohydrate and trace elements. Sodium thioglycollate and L-Cystine lowers the oxidation reduction potential of the medium making it suitable for the growth of anaerobes. The small amount of agar also helps in anaerobiosis.

INSTRUCTION FOR USE

- Dissolve 30.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool the medium in upright position. For maintenance of viability of cultures, add small amount of calcium carbonate into the containers before filling.



QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Appearance of prepared medium	: Light amber coloured, slightly opalescent viscous solution.
pH (at 25°C)	: 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Bacteroides vulgatus</i>	8482	50-100	Poor - fair	10-30%	35-37 °C (anaerobic condition)	18-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Good-luxuriant	≥50%	35-37 °C (anaerobic condition)	18-48 Hours
<i>Candida albicans</i>	10231	10-100	Good-luxuriant	≥50%	25-30 °C	2-7 Days
<i>Bacillus subtilis</i>	6633	50-100	Good-luxuriant	≥50%	35-37 °C	18-48 Hours
<i>Micrococcus luteus</i>	10240	50-100	Good-luxuriant	≥50%	35-37 °C	18-48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good-luxuriant	≥50%	35-37 °C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Good-luxuriant	≥50%	35-37 °C	18-48 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. Brewer, 1940, J.Bact., 35:10
2. Vera, 1944, J. Bact., 47:59
3. Hansen, Price and Clements, 1952, J. Bact., 64:772.

 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 MedNet GmbH Borkstrasse 10, 48163 Moers, Germany	 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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