

TMV 221 - MITIS SALIVARIUS AGAR BASE (VEG.)

INTENDED USE

For isolation of Streptococci from mixed cultures, especially *Streptococcus mitis*, *Streptococcus salivarius* and *Streptococcus faecalis* from grossly contaminated specimens.

PRODUCT SUMMARY AND EXPLANATION

This medium is developed by using Veg hydrolysate and Veg peptone which are free of BSE/TSE risks. Mitis Salivarius Veg Agar Base is the modification of Mitis Salivarius Agar Base which is prepared as described by Chapman for the isolation of *Streptococci* from mixed cultures showing alpha and gamma reactions on Blood Agar. This medium (with 1% potassium tellurite) is highly selective medium which enables to isolate *Streptococci* from highly contaminated specimens like exudates from body cavities and faeces etc., as it inhibits a wide variety of bacteria. Some authors have also used sodium azide in this medium to inhibit the growth of gram-negative bacteria like *Proteus*. Beta-haemolytic *Streptococci* produce colonies that resemble *Streptococcus mitis*.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	15.0
Veg peptone	5.0
Dextrose	1.0
Sucrose	50.0
Dipotassium phosphate	4.0
Trypan blue	0.075
Crystal violet	0.0008
Agar	15.0

PRINCIPLE

Veg hydrolysate and Veg peptone provide the essential growth nutrients. Dextrose and sucrose are the fermentable carbohydrates. Dipotassium phosphate buffers the medium. Trypan blue is an acidic, blue diazo dye while crystal violet is a basic dye and also a bacteriostatic agent which inhibits many gram-positive organisms.

INSTRUCTION FOR USE

- Dissolve 90 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 50-55°C and add 1 ml of sterile 1% Potassium Tellurite Solution.
- Do not overheat the medium after the addition of tellurite solution.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light blue coloured, homogeneous, free flowing powder.
Appearance of prepared medium	: Deep blue coloured, clear to slightly opalescent gel forms in petri plates.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION



Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	>=50 %	35-37°C	18-48 Hours
<i>Escherichia coli</i>	25922	50-100	Inhibited	0%	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Inhibited	0%	35-37°C	18-48 Hours
<i>Streptococcus mitis</i>	9895	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
<i>Streptococcus salivarius</i>	-	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. Chapman, 1946, Am. J. Digestive Diseases, 13:105.
2. Snyder and Lichstein, 1940, J. Infect. Dis., 67:113.
3. Lichstein and Snyder, 1941, J. Bact., 42:653.





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

***For Lab Use Only**
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