

TMV 1077 - SPS AGAR (VEG.)

INTENDED USE

For detection of *Clostridium perfringens* in foods.

PRODUCT SUMMARY AND EXPLANATION

SPS Veg Agar is the modification of SPS Agar and is prepared using Veg hydrolysate which is free from BSE/ TSE risk. SPS Agar (Sulphite - Polymyxin – Sulphadiazine) was devised by Angelotti et al and is a modification of the medium of Wilson and Blair and Mossel et al for the recovery of Clostridium species with Miller Prickett tubes. Most Clostridium species reduce.

COMPOSITION

Ingredients	Gms / Ltr
Veg Hydrolysate	15.0
Yeast extract	10.0
Sodium sulphite	0. 5
Polymyxin B sulphate	0.01
Sulphadiazine	0.12
Ferric citrate	0. 5
Agar	13.9

PRINCIPLE

Sulphite to sulphide which reacts with ferric citrate forming ferrous sulphide indicated by black coloured colonies. Certain strains of Clostridium perfringens fail to grow or form distinct black colonies. Other sulphite reducing gram positive and gram negative organisms are suppressed by Polymyxin B and Sulphadiazine.

Prepare serial dilutions of the samples to be tested and inoculate into SPS Veg Agar using the pour plate technique. If desired, pour cover layers using about 5 ml sterile medium. Incubate the plates anaerobically and enumerate the black colonies.

INSTRUCTION FOR USE

- Dissolve 40 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.

QUALITY CONTROL SPECIFICATIONS

: Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing **Appearance of Powder**

powder.

: Medium amber coloured, slightly opalescent gel forms in petri plates. Appearance of prepared medium

pH (at 25°C) $: 7.0 \pm 0.2$

INTERPRETATION

Cultural characteristics observed after an incubation under anaerobic conditions.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Clostridium perfringens	12924	50-100	Good- luxuriant	>=50 %	Black	35-37°C	18-48 Hours
Clostridium sporogenes	11437	50-100	Poor-good	20-40 %	Black	35-37°C	18-48 Hours
Escherichia coli	25922	>=10³	Inhibited	0%	-	35-37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	None- poor	0-10%	White	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 2-8°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.

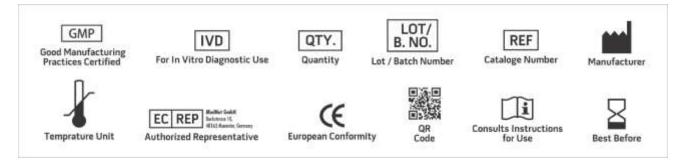
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Angelotti et al, 1962, Appl. Microbiol., 10:193.
- 2. Mossel, et al, 1956, J. Appl. Microbiol., 19:142.
- 3. Mossel, 1959, J. Sci. Food Agric., 19:662.
- 4. Downes, F.P and Ito K (Eds.), 2001, Compendium of Methods. For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C













NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019









