TMV 197 - MYP AGAR BASE (PHENOL RED EGG YOLK POLYMYXIN AGAR BASE) (VEG.)

INTENDED USE

For isolation and identification of pathogenic Staphylococci and Bacillus species.

PRODUCT SUMMARY AND EXPLANATION

These media are prepared by completely replacing animal based peptones with vegetable peptones which makes the media free of BSE/TSE risks. MYP Agar (Veg) is the modification MYP Agar formulated by Mossel et al and recommended by APHA for enumeration of *Bacillus cereus*. When present in large numbers in certain foodstuffs, *Bacillus cereus* can produce metabolites responsible for the clinical symptoms of food poisoning. MYP Agar (Veg) Base and Modified MYP Agar Base (Veg)have similar composition except for agar concentration.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	10.000
Veg extract No.1	1.000
D-Mannitol	10.000
Sodium chloride	10.000
Phenol red	0.025
Agar	15.000

PRINCIPLE

The medium consists of Veg peptone and Veg extract No 1 which serves as nitrogen source. Mannitol fermentation can be detected by phenol red, which imparts yellow colour to the mannitol fermenting colonies. Added egg yolk emulsion helps in differentiation of lecithinase producing colonies which are surrounded by a zone of white precipitate. Addition of Polymyxin B Sulphate helps to restrict growth of gram-negative bacteria such as *Escherichia coli* and *Pseudomonas aeruginosa*. These differentiating media allow differentiation of *Bacillus cereus* from other *Bacillus* species by its inability to ferment mannitol and poor sporulation. Acid produced by organisms other than *Bacillus cereus* often diffuse through the medium, making it difficult to distinguish between mannitol fermenters and non-fermenters. So it is advised to transfer the suspected colonies to a fresh medium to ascertain the true reaction.

INSTRUCTION FOR USE

- Dissolve 46.0 grams in 1000 ml purified/ distilled water.
- Heat to boiling with gentle swirling to dissolve the agar completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 55°C. Aseptically add sterile Polymyxin B selective supplement to a final concentration of 100 units per ml and 100 ml sterile Egg Yolk Emulsion per 1000 ml medium. Mix well and pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light pink coloured, homogeneous, free flowing powder.
Appearance of prepared medium : Red coloured, clear to slightly opalescent gel forms of basal medium. With addition of Egg Yolk Emulsion light orange coloured opaque gel forms in petri plates.
pH (at 25°C) : 7.1±0.2

INTERPRETATION

Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	Yellow	32°C	18-40 Hours
Bacillus cereus	10876	50-100	Luxuriant	>=70%	Red	32°C	18-40 Hours
Proteus mirabilis	25933	50-100	Luxuriant	>=70%	Red	32°C	18-40 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	Yellow	32°C	18-40 Hours
Escherichia coli	25922	50-100	None-poor	0-10%	-	32°C	18-40 Hours
Pseudomonas aeruginosa	27853	50-100	None-poor	0-10%	-	32°C	18-40 Hours

PACKAGING:

In pack size of 100 gm and 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.

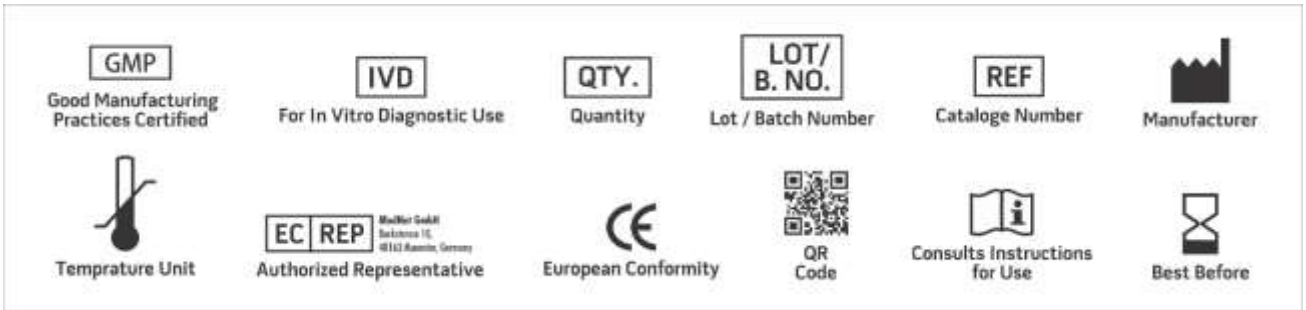
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Mossel D.A.A., Koopman M.J. and Jongerium E., 1967, Appl. Microbiol, 15:650.
2. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
3. Nygren B., 1962, Acta Path. Microbiol. Scand., 56 : Suppl. 1.



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

***For Lab Use Only**

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