Technical Information

MiVeg Peptone Water

Product Code : VM1028

Application:- MiVeg Peptone Water is used as a growth medium and can also be used as a base for carbohydrate fermentation media and for performing indole test.

Composition

Ingredients	Gms / Litre
MiVeg peptone	10.00
Sodium chloride	5.00
Final pH (at 25°C)	7.2 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

MiVeg Peptone Water is prepared by adding MiVeg peptone instead of Peptic digest of animal tissue thereby making the medium BSE/TSE risks free. MiVeg Peptone Water is the modification of Peptone Water which is recommended (1, 2, 3) for studying the ability of an organism to ferment a specific carbohydrate and indole production. MiVeg Peptone Water with pH adjusted to 8.4 is suitable for the cultivation and enrichment of *Vibrio* species.

MiVeg peptone in the medium supplies all the essential growth nutrients to the growing organisms. Saccharose, rhamnose, salicin are generally added to study the carbohydrates fermentation ability of organisms. About 0.5-1% of carbohydrate added separately to the basal medium before or after sterilization. Phenol red dye incorporated into the basal medium for the detection of end products of fermentation reaction. In the presence of acid, phenol red shows a colour change from red to yellow. If desired, Durham's tube may be used to detect the gas production if produced.

Methodology

Suspend 15 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat if necessary to dissolve the medium completely. Dispense in tubes with or without inverted Durham's tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge homogeneous, free flowing powder.

Colour and Clarity of prepared medium

Light yellow coloured, clear solution without any precipitate.

Reaction

Reaction of 1.5% w/v aqueous solution is pH 7.2 ± 0.2 at 25°C.

pH Range

7.0-7.4

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours with the addition of phenol red and dextrose for study of carbohydrate fermentation.

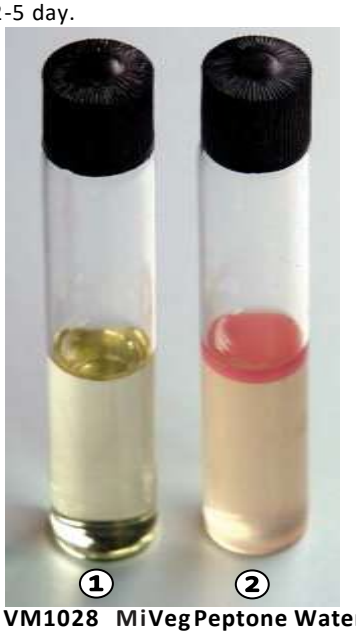
Organisms (ATCC)	Inoculum (CFU)	Growth	Indole production	Acid production
Escherichia coli (25922)	10^2-10^3	luxuriant	+*	+
Salmonella serotype Typhimurium (14028)	10^2-10^3	luxuriant	_	+
Staphylococcus aureus (25923)	10^2-10^3	luxuriant	_	+

Key: +* = positive, red ring observed on addition of Kovac's Indole reagent

\+ = Acid production, yellow colouration of the medium

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 day.



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1. Control
2. *Escherichia coli*

Further Reading

1. MacFaddin J.F., 2000(ed), Biochemical Tests for Identification of Medical Bacteria, 3rd edition, Lippinicott Williams and Wilkins, New York
2. Finegold and Baron, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.
3. Patrick R. Murray, Baron, Pfaller, Tenover and Yolken (Eds.), 2005, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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