Emerson HiVeg™ Agar

MV325

Intended Use:

Recommended for isolation and cultivation of *Actinomycetaceae*, *Streptomycetaceae,* fungi and moulds.

Composition**

Ingredients	g / L
HiVeg™ extract	4.000
Yeast extract	1.000
HiVeg™ peptone	4.000
Dextrose (Glucose)	10.000
Sodium chloride	2.500
Agar	20.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.5 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Add 0.05 grams / litre cycloheximide, if desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Emerson Agar was originally formulated by Emerson et al (1) and is used for the cultivation of moulds and bacterial species resembling moulds (2). This medium was further modified by Gottlieb et al (3) and is used for screening potent antibiotic-producing organisms (4). In their study, they stored *Streptomyces* in soil for long time and transferred them as needed, to slants of Emerson Agar. The slant cultures were incubated for 3-7 days. The spores were gently scraped from the cultures surface to form a spore inoculum. Emerson HiVeg™ Agar is prepared by using vegetable peptones in place of animal based peptones which make the media free of BSE/TSE risks. Yeast extract provides a source of trace elements, vitamins and amino acids. For the selective isolation of *Streptomyces* species, cycloheximide is incorporated in the medium, which limits the growth of moulds. This medium is also used for routine cultivation and maintenance of pure cultures.

Type of specimen

please add specimens

Specimen Collection and Handling:

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical and serological tests must be carried out for further identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 2.0% agar gel.

Colour and Clarity of prepared medium
Light amber coloured, clear to slightly opalescent gel forms in Petri plates
Reaction
Reaction of 4.15% w/v aqueous solution at 25°C. pH : 7.0±0.2
pH
6.80-7.20
Cultural Response
Cultural characteristics observed after an incubation at 30°C for 48-72 hours

Organism	Growth
* *Aspergillus brasiliensis* ATCC 16404 (00053*)	luxuriant
Saccharomyces cerevisiae ATCC 9763 (00058*)	luxuriant
Streptomyces albus subsp *albus* ATCC 3004	luxuriant
Streptomyces lavendulae ATCC 8664	luxuriant
Streptomyces achromogenes ATCC 12767	luxuriant

Key : (*) Corresponding WDCM numbers. (#) Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1. Emerson R. L., Whiffen A. J., Bohonos M. and DeBoer C., 1946, J. Bacteriol., 52:357.
2. Haynes W. C., Wickerham L. J. and Hesseltine C. W., 1955, Appl. Microbiol., 3:361.
3. Gottlieb D., Bhattacharya P. K., Anderson H. W. and Carter H. E., 1948, J. Bacteriol., 55:409.
4. Schmitz H. and Woodside R., 1955, Antibiot. Chemother., 5:652.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. Jorgensen, J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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