Ready Prepared Media

Technical Information

Anaerobic Agar (Brewer) Plate

Product Code: PM 1491

Application : Recommended for the isolation and sensitivity testing of anaerobic and microaerophilic organisms and study of colonial morphology.

Composition**

Ingredients	Gms / Litre
Proteose peptone	10.000
Tryptone	5.000
Yeast extract	5.000
Dextrose (Glucose)	10.000
Sodium chloride	5.000
Sodium thioglycollate	2.000
Sodium formaldehyde sulphoxylate	1.000
Resazurin	0.002
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Brewer (1) devised this medium for use with Brewer anaerobic cover to permit surface growth of anaerobes and microaerophiles on agar without the use of anaerobic jar. This medium is suitable for isolation of facultative and obligate anaerobes and for the study of colonial morphology as colonies can be readily seen on the light coloured agar and are easily accessible (2,3). Proteose peptone, tryptone and yeast extract provides nitrogen, carbon, long chain amino acids,vitamins and other essential growth nutrients. Dextrose (Glucose) is a carbohydrate source. This medium contains sodium thioglycollate and sodium formaldehyde sulphoxylate that provide adequate anaerobiosis, which is indicated by resazurin present in the medium. Resazurin imparts pink colour to the medium in presence of oxygen.

Type of specimen

Clinical samples : faeces, urine, etc.; foods and animal feeding stuff

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use. For professional use only. Read the label before opening the pack. 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 clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Ensure that the clinical samples are properly transported under anaerobic conditions.
2. Proper anaerobic conditions must be maintained for optimal recovery of organisms.
3. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
4. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
5. It is recommended to store the plates at 24-30°C to avoid condensation.

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.

Methodology

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Note: *Prior to inoculation, the plates should be pre-incubated anaerobically for 48 hours to ensure proper results.*

Quality Control

Appearance
Sterile Anaerobic Agar (Brewer) in 90mm disposable plate with smooth surface and absence of black particles/cracks/ bubbles

Colour
Light pink coloured medium

Quantity of medium
25ml of medium in 90mm plate

pH
7.00- 7.40

Sterility Check
Passesreleasecriteria

Cultural response
Cultural characteristics observed under anaerobic condition after an incubation at 35-37°C for 24 - 48 hours.

Oragnism	Inoculum (CFU)	Growth	Recovery
Clostridium botulinum ATCC 19397	50-100	luxuriant	>=50%
Clostridium perfringens ATCC 12924	50-100	luxuriant	>=50%
Clostridium sporogenes ATCC 11437	50-100	luxuriant	>=50%

Key : (*) Corresponding WDCM numbers.
- Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

On receipt store between 20-30°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

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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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Further Reading

1. Brewer, 1942, Science, 95, 587.
2. Baron E. J., Peterson and Finegold S. M., Bailey & Scotts Diagnostic Microbiology, 9th Ed., 1994, Mosby-Year Book, Inc., St. Louis, Mo.
3. Isenberg (Ed.), 1992, Clinical Microbiology Procedures Handbook, American Society for Microbiology, Washington,D.C.
4. 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.

Disclaimer

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and developmentwork carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
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- Do not use the products if it fails to meet specificatons for identity and performens parameters.