

TM 011 - ANAEROBIC AGAR (BREWER)

INTENDED USE

For isolation and sensitivity testing of anaerobic and microaerophilic organisms.

PRODUCT SUMMARY AND EXPLANATION

Brewer 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.

Dispense 50-60 ml medium per 95 x 20 mm plate. For best results, use porous tops for the plates during solidification to obtain a dry surface. Inoculation can be done by streaking or smearing. After inoculation of the medium, cover with Brewer Anaerobic Petri dish cover. The sealing ring inside the cover should make a perfect contact with the medium and must not be broken before the end of the incubation period. When standard plates are used, dispense 0.1 to 1.0 ml of inoculum into plates and mix 20-25 ml of sterile medium.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Casein enzymic hydrolysate	5.000
Yeast extract	5.000
Dextrose	10.000
Sodium chloride	5.000
Sodium thioglycollate	2.000
Sodium formaldehyde sulphoxylate	1.000
Resazurin	0.002
Agar	15.000

PRINCIPLE

Proteose peptone, casein enzymic hydrolysate, yeast extract provides nitrogen, vitamin and amino acids. Dextrose 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.

INSTRUCTION FOR USE

- Dissolve 53 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. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS













Appearance of Powder : Cream to yellow homogeneous free flowing powder.

: Light amber coloured clear to slightly opalescent gel forms in Petri plates that Appearance of prepared medium

becomes red due to aeration on standing.

: 7.2±0.2 pH (at 25°C)

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Clostridium botulinum	19397	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Clostridium perfringens	12924	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Clostridium sporogenes	11437	50-100	Luxuriant	>=70%	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 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.

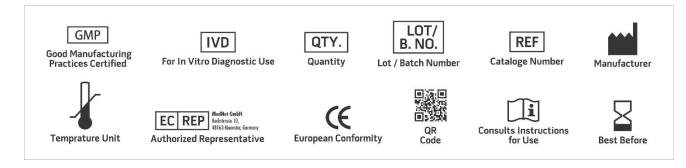
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

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

















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

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