Anaerobic Agar

Intended Use
Anaerobic Agar is recommended for cultivation of anaerobic microorganisms.

Summary
Anaerobic Agar was originally designed for surface cultivation of members of the genus *Clostridium* and other anaerobic organisms on plates. 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. Anaerobic bacteria vary in their sensitivity to oxygen and nutritional requirements. Anaerobic bacteria lack cytochromes and thus are unable to use oxygen as a terminal electron acceptor.

Principle
Tryptone in the medium provides nitrogen, vitamins, minerals and amino acids essential for growth. Dextrose is the fermentable carbohydrate providing a source of carbon and energy. Sodium chloride maintains the osmotic equilibrium. Sodium thioglycollate and sodium formaldehyde sulfoxylate are reducing agents generating a low oxidation-reduction potential, thus maintaining good anaerobic conditions. Methylene blue serves as an indicator of anaerobiosis with a blue colour indicating the presence of oxygen.

Formula*

Ingredients	**g/L**
Tryptone	20.0
Dextrose	10.0
Sodium Chloride	5.0
Sodium Thioglycollate	2.0
Sodium Formaldehyde Sulfoxylate	1.0
Methylene Blue	0.002
Agar	20.0
Final pH (at 25°C)	7.2 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Clinical - stool, blood, abscess

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 58.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Heat with frequent agitation and boil for one minute to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Light beige coloured, homogeneous free flowing powder.
Prepared Appearance: Light green coloured, slightly opalescent gel forms in petridishes.

Cultural Response: Cultural characteristics observed after an incubation of 18-48 hours at 35°C ± 2°C when incubated anaerobically.

Organism (ATCC)	Growth
Bacteroides fragilis (25285)	Good
Clostridium sporogenes (11437)	Good
Clostridium perfringens (12914)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Interpretation of Result

Refer to U.S.P. and other appropriate references for Interpretation of Results sample.

Precautions / Limitations

1. Methylene blue is inhibitory to some anaerobic microorganisms.
2. Clinical specimens must be obtained properly and transported to the laboratory in suitable anaerobic transport container.
3. It is essential to determine the environment of the medium so as to ascertain whether it is anaerobic.
4. To ascertain whether an organism is an anaerobe, it is essential to perform aerotolerance testing on each isolate recovered.

Warranty

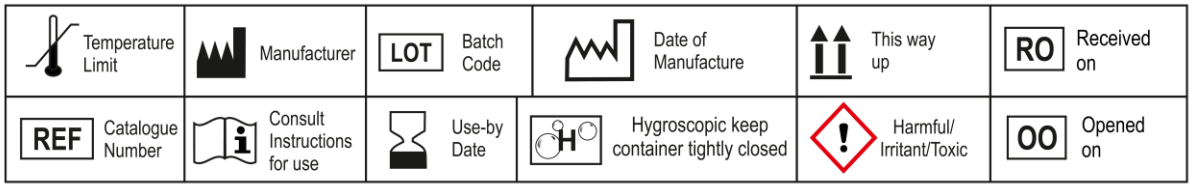
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Brewer J. H., 1942, Science, 95:587; Vera J., 1942, J. Bacteriol., 44:497.
2. Isenberg, 1992.Clinical Microbiology Procedures Handbook, American Society for Microbiology, Washington, D.C.
3. Baron E. J., Peterson & Finegold S. M., Bailey & Scotts Diagnostic Microbiology, 9th Ed., 1994, Mosby-Year Book, Inc., St. Louis, Mo.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201010100100	Dehydrated Culture Media	100 g
201010100500	Dehydrated Culture Media	500 g
205010480100	Ready Prepared Plate (90 mm)	100 Plates



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.