Anaerobic Agar (Brewer)



Medium used for the cultivation and enumeration of anaerobic and microaerophilic bacteria.

CONTENTS (Liter)

Pancreatic Digest of Casein	5.0 g
Proteose Peptone No. 3	10.0 g
Yeast Extract	5.0 g
Glucose	10.0 g
Sodium Chloride	5.0 g
Sodium Thioglycollate	2.0 g
Sodium Formaldehyde Sulfoxylate	1.0 g
Resazurin	0.002 g
Agar	20.0 g
Final pH 7.2 \pm 0.2 at 25°C	

PROCEDURE

Suspend 58.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

INTERPRETATION

Anaerobic Agar (Brewer) is a medium used for the cultivation and enumeration of anaerobic and microaerophilic bacteria. Pancreatic digest of casein, proteose peptone no.3 and yeast extract provide nitrogen, carbon, vitamins and minerals. Glucose is the carbohydrate. Sodium chloride maintains the osmotic balance. Sodium thioglycollate and sodium formaldehyde sulfoxylate are the reducing agents. Resazurin is an indicator of anaerobic condition with a pink color indicating the presence of oxygen. Agar is the solidifying agent.

TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 \pm 2°C for 18 - 48 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: $35 \pm 2^{\circ}\text{C}$ / 18 - 48 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
Bacteroides fragilis	25285	10 ² -10 ³	good
Clostridium perfringens	13124	10 ² -10 ³	good

STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2 - 8°C.

REFERENCES

- 1. Brewer. 1942. Science 95:587.
- 2. Isenberg (ed.). 1992. Clinical microbiology procedures handbook, American Society for Microbiology, Washington, D.C.
- 3. Baron, Peterson and Finegold. 1994. Bailey & Scott's diagnostic microbiology, 9th ed. Mosby-Year Book, Inc., St.Louis,Mo.
- 4. Murray, Baron, Pfaller, Tenover and Yolken (ed.). 1999. Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.

PACKAGE

Cat. No : MB-A1320 Anaerobic Agar (Brewer)	500 G
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