

# Anaerobic Agar



Medium used for the cultivation and enumeration of anaerobic bacteria.

## • CONTENTS (Liter)

Pancreatic Digest of Casein	20.0 g
Sodium Chloride	5.0 g
Dextrose	10.0 g
Sodium Thioglycollate	2.0 g
Sodium Formaldehyde Sulfoxylate	1.0 g
Methylene Blue	0.002 g
Agar	20.0 g
Final pH $7.2 \pm 0.2$ at $25^{\circ}\text{C}$	

## • 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  $121^{\circ}\text{C}$  for 15 minutes. Cool to  $45 - 50^{\circ}\text{C}$  in water bath. Mix well. Pour into petri dishes.

## • INTERPRETATION

Anaerobic Agar is a medium used for the cultivation and enumeration of anaerobic bacteria. Pancreatic digest of casein provides nitrogen, carbon, vitamins and minerals. Sodium chloride maintains the osmotic balance. Dextrose is the carbohydrate. Sodium thioglycollate and sodium formaldehyde sulfoxylate are the reducing agents. Methylene blue is an indicator of anaerobic condition with a blue color indicating the presence of oxygen. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at  $35 \pm 2^{\circ}\text{C}$  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 blue

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

Microorganism	ATCC	Inoculum CFU	Growth
<i>Bacteroides fragilis</i>	25285	$10^2$ - $10^3$	good
<i>Clostridium perfringens</i>	13124	$10^2$ - $10^3$	good
<i>Clostridium sporogenes</i>	11437	$10^2$ - $10^3$	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. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Brewer. 1942. Science 95:587.

**• PACKAGE**

Cat. No : MB-A0893 Anaerobic Agar	500 G
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