Technical Information

Anaerobic Agar without Dextrose

Product Code: DM 1230

Application: - Anaerobic Agar without Dextrose is used to study carbohydrate fermentation and haemolytic activity of Clostridia, Streptococci and other micro organisms.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	17.500
Sodium chloride	2.500
Sodium thioglycollate	2.000
Sodium formaldehyde sulphoxylate	1.000
Methylene blue	0.002
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Anaerobic Agar without Dextrose [1] is used for observing carbiohydrate fermentation and haemolytic activity of Clostridia, Streptococci and other organisms. Casein enzymic hydrolysate is the only source of nutrient present. Other peptones, like yeast extract or papaic digest of soyabean meal which are riched in carbohydrates and favours haemolytic reactions are not used in this medium. Additions of sodium thioglycollate and sodium formaldehyde sulphoxylate create anaerobic conditions necessary for cultivation of anaerobes which is indicated by methylene blue dye present in the medium. Sodium chloride maintains osmotic equilibrium. For haemolytic tests anaerobic blood agar plates may be prepared in one of the following ways; Sterile blood in about 0.7 ml amount and small inoculum may be mixed with 25-50 ml of cooled agar and mixture is poured into the Petri plate filling it up to 3/4. After solidification the lid is replaced with Brewer Anaerobic Petri plate cover. An ordinary sterile Blood Agar plate (made from Blood Agar Base or Tryptone Soya Agar) may be streaked with a culture. Melted and cooled Anaerobic Agar without Dextrose is then poured over the Blood Agar to provide the proper depth. After solidification the lid is replaced with anaerobic Petri plate cover. The anaerobic cover should not rest on the Petri plate bottom: its inner ridge should seal the agar, and the medium within the ridge should not touch the cover at any point. The medium should be cherry red in colour after addition of blood.

Methodology

Suspend 38 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (12 1°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Quality Control

Physical Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates that becomes greenish due to aeration on standing.

Reaction

Reaction of 3.8% w/v aqueous solution at 250 C pH :7.2±0.2

pH Range:- 7.00-7.40

Cultural Response/Characteristics

DM 1230: Cultural characteristics observed under anaerobic condition after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Clostridium butyricum ATCC 13732	50-100	good-luxuriant	>=50%
Clostridium perfringens ATCC 12919	50-100	good-luxuriant	>=50%
Clostridium sporogenes ATCC 11437	50-100	good-luxuriant	>=50%

Storage and Shelf Life

Dried media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 days.

Further Reading

1. Vera J., 1942, J. Bact., 44:497

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 development work carried a 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.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specificatons for identity and performens parameters.