

Product Data Sheet

CHO MEDIUM BASE (FERMENTATION BROTH)

Product No. GB-DCM-00144-1A

INTENDED USE

For studies of anaerobic fermentation by adding carbohydrates.

Product Description

Identification of anaerobes is based on cellular morphology and colony characteristics on blood agar and confirmation by biochemical tests. Carbohydrate utilization patterns play a key role in the identification of anaerobes. Metabolism of anaerobes is less efficient and therefore they require auxiliary growth factors. For the anaerobic microorganisms, proper collection and transport of suspected specimens is of pivotal importance. Exposure of the specimens to air should be minimized to the possible extent and they should be promptly cultured in the laboratory under proper atmospheric conditions. CHO Medium Base is recommended for studying fermentation of anaerobic bacteria.

Product Specifications

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	7.000
L-Cystine	0.250
Sodium chloride	2.500
Ascorbic acid	0.100
Sodium thioglycollate	0.500
Bromo thymol blue	0.010
Agar	0.750

PRINCIPLE

Tryptone and ascorbic acid enhance growth of oxygen sensitive and fastidious anaerobes (3). Sodium chloride maintains the osmotic equilibrium of the medium. Yeast extract serves as a source of B-complex nutrients. L-Cystine and thioglycollate help in maintaining reduced atmosphere in the medium. Small amount of agar also aids in creating anaerobiosis. Bromothymol blue is the pH indicator.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: A Light yellow to pink homogeneous free flowing powder
 Appearance of prepared medium Red coloured, clear to slightly opalescent gel forms in Petri plates.

PH (at 25°C): 7.0±0.2

Microorganism	ATCC	Inoculum (CFU)	Growth	Fermentation w/Dextrose	Fermentation w/Lactose	Incubation Temperature	Incubation Period
Bacteroides melaninogenicus	25611	50-100	luxuriant	Negative reaction, no colour change	Positive reaction, yellow colour	35-37°C	Upto 7 Days
Bacteroides vulgatus	8482	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction, no colour change	35-37°C	Upto 7 Days
Bacteroides fragilis	25285	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction, yellow colour	35-37°C	Upto 7 Days
Clostridium botulinum	25763	50-100	Luxuriant	Positive reaction, yellow colour	Negative reaction, no colour change	35-37°C	Upto 7 Days
Clostridium perfringens	12924	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction, yellow colour	35-37°C	Upto 7 Days
Escherichia coli	35218	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction, yellow colour	35-37°C	Upto 7 Days

INSTRUCTION FOR USE

- Dissolve 26.11 grams in 1000 ml purified / 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.
- Aseptically add 6.25 ml of 10% sterile carbohydrate solution.
- Mix well and dispense in sterile tubes containing inverted Durhams tubes.

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.

This product is for research use only.