Clostridium Butyricum Agar

Intended Use

Clostridium butyricum Agar is a medium used for growth and maintenance of *Clostridium aminobutyricum* and other *Clostridium* species.

Summary and Principle

Clostridium butyricum is a strictly anaerobic endospore forming Gram-positive. Butyric acid producing *bacillus* subsisting by means of fermentation using an intracellularly accumulated amylopectin like α polyglucan (granulose) as a substrate. *C. butyricum* is a soil inhabitant in various parts of the world, has been cultured from the stool of healthy children and adults, and is common in soured milk and cheeses. It is uncommonly reported as a human pathogen and is widely used a probiotic in Asia.

Formula*

Ingredients	g/L
Di-Potassium hydrogen phosphate	7.0
Y-Aminobutyric acid	5.0
Yeast Extract	3.0
Potassium dihydrogen phosphate	1.3
Magnesium Chloride Hexahydrate	0.2
Calcium Chloride Dihydrate	0.01
Ferric Chloride Hexahydrate	0.01
Sodium Molybdate Dihydrate	1.0
Resazurin	1.0
Agar	1.5
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 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

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 18.22 g of the powder in 960 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Mix well. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Aseptically and anaerobically add 20.0 mL of sterile 5% Sodium Hydrogen Carbonate Solution and 20.0 mL of sterile 4.5% Sodium Sulfide Nonahydrate solution, mix thoroughly.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder
Prepared Appearance: Yellow coloured, clear to slightly hazy with pink to rose pink colour indicator on top.
Cultural Response: Cultural characteristics observed after an incubation of 48-72 hours at 30°C -35ºC.

Organism (ATCC)	Growth
Clostridium butyricum (19398)	Good

Performance and Evaluation

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

1. Directions
2. Storage
3. Expiry

Precautions/Limitations

Further biochemical test must be carried out for confirmation

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. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201030130500	Dehydrated Culture Media	500 g