

Fermentation Broth Base

Liquid medium for the carbohydrate utilization test, according to ISO 11290.

TYPICAL FORMULA	(g/l)
Proteose Peptone	10.0
Meat Extract	1.0
Sodium Chloride	5.0
Bromocresol Purple	0.02
Final pH 6.8 ± 0.2 at 25°C	

DESCRIPTION

Fermentation Broth Base is a liquid medium used with added carbohydrate in differentiating pure cultures of bacteria. This medium is formulated according to ISO 11290 and is recommended for the confirmation test of *Listeria monocytogenes*.

PRINCIPLE

Peptone and meat extract supply amino acids, nitrogen, carbon, minerals, vitamins and other nutrients which support the growth of microorganism. Sodium chloride maintains the osmotic balance of the medium. Bromocresol purple is the pH indicator.

PREPARATION

Suspend 16.0 g of powder in 1 liter of deionized or distilled water. Bring to boil and shake until completely dissolved. Dispense into tubes containing inverted Durham tubes. Sterilize at 121°C for 15 minutes. Cool up to 45-50°C. Add the suitable carbohydrate solution to give a final concentration of 0.5%. Mix well.

TECHNIQUE

Inoculate each tube with a loopful of a pure culture. Incubate at 37°C for up to 7 days.

INTERPRETATION OF RESULTS

Observe daily for colour change from purple to yellow (acid production) and gas formation.

STORAGE AND TRANSPORT CONDITIONS

The powder is very hygroscopic, store the powder at 10-30°C, 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 or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

- ISO 11290-1:1996(E). Microbiology of food and animal feeding stuffs – Horizontal method for the detection and enumeration of *Listeria monocytogenes* – Part1: Detection method.
- FDA Bacteriological Analytic Manual (2005) 18th Ed., AOAC, Washington, D.C.



PRODUCT SPECIFICATIONS

NAME

Fermentation Broth Base

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
610030	500 g	500 g of powder in plastic bottle
620030	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

6.8 ± 0.2

USE

Fermentation Broth Base is a liquid medium used with added carbohydrate in differentiating pure cultures of bacteria. This medium is formulated according to ISO 11290 and is recommended for the confirmation test of *Listeria monocytogenes*

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: light yellow

Ready-to-use medium

Appearance: clear to slightly hazy

Colour: purple

SHELFLIFE










4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
 Carbohydrate: rhamnose
 Inoculum for productivity: ≤100 CFU
 Incubation Conditions: 18-48 h at 35 ± 2°C

Microorganism		Growth	Colour	Gas
<i>Escherichia coli</i>	ATCC® 25922	Good	Yellow	+
<i>Listeria monocytogenes</i>	ATCC® 19111	Good	Yellow	-
<i>Staphylococcus aureus</i>	ATCC® 25923	Good	Purple	-

TABLE OF SYMBOLS

 LOT	Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
 REF	Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instructions for use	



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