

## PE- 2 BROTH

Medium for detection and cultivation of mesophilic anaerobic spore formers in specimens collected from food processing plants.

### TYPICAL FORMULA (g/L)

Peptone	20.0
Yeast Extract	3.0
Bromocresol Purple	0.04
Final pH $6.9 \pm 0.2$	

### DESCRIPTION

**PE- 2 BROTH** is a dehydrated medium, described by Folinazzo and Troy and recommended by APHA, for detection and cultivation of mesophilic anaerobic spore formers in specimens collected from food processing plants. These organisms mainly include *Clostridium spp.*

### PRINCIPLE

Peptone provides amino acids and proteins while yeast extract is a source of amino acids and vitamins of group B for clostridial growth. Bromocresol Purple is the pH indicator.

Clostridial growth range covers the temperature of the normal storage of canned and other processed foods including refrigerated storage of cured meats and hence these anaerobes are important in the spoilage of low- acid foods packed in the hermetically sealed containers.

### PREPARATION

Suspend 23.0 g of powder in 1L of distilled or deionized water. Heat until completely dissolved. Dispense into final tubes. Sterilize in autoclave at 121 °C for 15 minutes.

### TECHNIQUE

Inoculate the sample in the tube and add 2-3 drops of vaselin oil. Incubate at 30-35°C for 72 hours or up to 7 days if desired as some spores germinate slowly.

### STORAGE

10-30°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.  
Store the prepared medium at 2-8 °C.

### WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of  $\geq 1\%$ . The product must be used only by properly trained operators.

### DISPOSAL of WASTE

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

### REFERENCES

1. Folinazzo J.F. and Troy V. S. 1954. Food Technol. 8: 280.
2. Vanderzant C. and Splittstoesser D. (Eds) 1992. Compendium for the Microbiological Examination of Foods, 3<sup>rd</sup> ed., APHA, Washington DC.



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## PRODUCT SPECIFICATIONS

### NAME

PE- 2 BROTH

### PRESENTATION

Dehydrated medium

### STORAGE

10-30 °C

### PACKAGE

Code	Content	Packaging
610346	500 g	500 g of powder in plastic bottle
620346	100 g	500 g of powder in plastic bottle

### pH OF THE MEDIUM

6.9± 0.2

### USE

PE- 2 BROTH is a dehydrated medium, described by Folinazzo and Troy and recommended by APHA, for detection and cultivation of mesophilic anaerobic spore formers in specimens collected from food processing plants. These organisms mainly include *Clostridium spp.*

### TECHNIQUE

Refer to technical sheet of the product.

### APPEARANCE OF THE MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous.

Colour: beige

Prepared medium

Appearance: clear

Colour: purple

### SHELF LIFE

4 years

### QUALITY CONTROL

1. Control of general characteristics, label and print

2. Sterility control

7 days at 25 ± 1 °C, in aerobiosis

7 days at 36 ± 1 °C, in aerobiosis

3. Microbiological control

Inoculum for productivity: 10-100 UFC/ml









Inoculum for selectivity: 10<sup>4</sup>-10<sup>5</sup> UFC/ml

Inoculum for specificity: ≤ 10<sup>4</sup> UFC/ml

Incubation conditions: 18-24 hours at 30-35°C

Microorganisms		Growth
<i>Clostridium sporogenes</i>	ATCC 19404	Good
<i>Proteus mirabilis</i>	ATCC 25933	Good
<i>Escherichia coli</i>	ATCC 25922	Good
<i>Staphylococcus aureus</i>	ATCC 25923	Good
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good
<i>Enterococcus faecalis</i>	ATCC 19433	Good

### TABLE OF SYMBOLS

	Manufacturer		Batch code		Keep away from heat		Contains sufficient for <n> tests
	Catalogue number		Temperature limitation		Use by		Caution, consult accompanying documents



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