

# P-A (Presence-Absence) Broth

Medium used for the isolation and identification of coliforms in treated water.

## • CONTENTS (Liter)

Beef Extract	3.0 g
Peptone	5.0 g
Lactose	7.46 g
Pancreatic Digest of Casein	9.83 g
Dipotassium Phosphate	1.35 g
Monopotassium Phosphate	1.35 g
Sodium Chloride	2.46 g
Sodium Lauryl Sulfate	0.05 g
Bromocresol Purple	0.0085 g
Final pH = 6.8 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 91.53 G of powder in 1 L of distilled or deionized water for the preparation of the triple strength. Heat to boiling until completely dissolved. Dispense 50 mL into 250 mL screw cap dilution bottles. Sterilized by autoclave at 121°C for 12 minutes. Cool to room temperature.

## • INTERPRETATION

P-A (Presence-Absence) Broth is a medium used for the isolation and identification of coliforms in treated water. Beef extract, peptone and pancreatic digest of casein provide nitrogen, carbon, vitamins and minerals. Lactose is the fermentable carbohydrate. Phosphates are the buffering agents. Sodium chloride maintains the osmotic balance. Sodium lauryl sulfate inhibits many organisms except coliforms. Bromocresol purple is the indicator, lactose fermenting organisms change the color of the medium from purple to yellow.

## • TECHNIC

Inoculate 100 mL of the water sample to 50 mL of the sterile triple strength medium. Incubate at 35 ± 0.5°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: clear to slightly opalescent

Color: purple

Incubation conditions: 35 ± 0.5°C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	10 <sup>2</sup> -10 <sup>3</sup>	good	yellow
<i>Enterococcus faecalis</i>	29212	10 <sup>2</sup> -10 <sup>3</sup>	good	purple to light gray-yellow
<i>Pseudomonas aeruginosa</i>	27853	10 <sup>2</sup> -10 <sup>3</sup>	good	purple

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## • REFERENCES

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## • PACKAGE

Cat No : MB-P1317 P-A (Presence-Absence) Broth	500 G
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