

Marine Broth

Medium used for the cultivation of heterotrophic marine bacteria.

• CONTENTS (Liter)

Peptone	5.0 g
Yeast Extract	1.0 g
Ferric Citrate	0.1 g
Sodium Chloride	19.45 g
Magnesium Chloride	5.9 g
Magnesium Sulfate	3.24 g
Calcium Chloride	1.8 g
Potassium Chloride	0.55 g
Sodium Bicarbonate	0.16 g
Potassium Bromide	0.08 g
Strontium Chloride	0.034 g
Boric Acid	0.022 g
Sodium Silicate	0.004 g
Sodium Fluoride	0.0024 g
Ammonium Nitrate	0.0016 g
Disodium Phosphate	0.008 g
Final pH = 6.6 ± 0.2 at 25°C	

• PROCEDURE

Suspend 37.35 G of powder in 1L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Marine Broth is a medium used for the cultivation of heterotrophic marine bacteria. Peptone is a source of carbon, nitrogen and essential nutrients. Yeast extract provides vitamin B complex nutrients and other growth factors. Sodium chloride maintains the osmotic balance. Disodium phosphate is the buffering agent. Ferric citrate, magnesium chloride, magnesium sulfate, calcium chloride, potassium chloride, sodium bicarbonate, potassium bromide, strontium chloride, boric acid, sodium silicate, sodium fluoride, ammonium nitrate provide the essential electrolytes and minerals.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 20 - 25°C for 40 - 72 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: slightly opalescent with precipitate

Color: light amber

Incubation conditions: 20 - 25°C / 40 - 72 hours

Microorganism	ATCC	Inoculate CFU	Growth
<i>Vibrio fischeri</i>	7744	50-100	good
<i>Vibrio harveyi</i>	14126	50-100	good
<i>Vibrio parahaemolyticus</i>	17802	50-100	good

• 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 or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. ZoBell. 1941. J. Mar. Res.
2. Lyman and Fleming. 1940. J, Mar. Res.
3. Buck and Cleverdon. 1960. Limnol. Oceanogr.
4. Sizemore and Stevenson. 1970. Appl. Microbiol.
5. Weiner. Segall and Colwell. 1985. Appl. Environ. Microbiol.

• PACKAGE

Cat. No : MB-M1512 Marine Broth	500 G
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• MICROBIAL CULTURE IMAGES



None

V.parahaemolyticus
ATCC 17802

Incubation conditions : 20-25°C 40-72h