

## Vibrios/Broth

(Transport and enrichment medium)

355-5914

### DEFINITION

A rich and highly saline medium for the transport and selective development of *Vibrio cholerae* and other enteropathogenic vibrios.

### STANDARDS

#### FOOD MICROBIOLOGY

- **NF ISO 8914 (May 1991):** Microbiology - General guidelines for the detection of *Vibrio parahaemolyticus*.

### PRINCIPLE

The nutrient substances provided by the peptone favor the growth of most vibrios. The high concentration of sodium chloride renders the medium selective with regard to other bacteria.

### PRESENTATION

#### Ready-to-use

9 ml x 25 tubes (screw-topped) **code 355-5914**

### STORAGE

- Ready-to-use: + 2°C to 8 °C.
- Expiration date and batch number are shown on the package.

### THEORETICAL FORMULA

Peptone 30 g  
Sodium chloride 30 g  
Distilled water 1,000 ml  
Final pH (25°C) = 8.6 ± 0.2

### EQUIPMENT REQUIRED (NOT SUPPLIED) (non-exhaustive)

- Scales
- Sterile weighing bags
- Grinder
- Test tubes (20 x 200 mm) with autoclave-proof stoppers
- Sterile pipettes (10 ml, etc)
- Thermostatically-controlled incubator or incubation room, precise to ± 1°C
- Autoclave
- All usual laboratory equipment.

### PROTOCOL

#### • Transport

Place a few ml of the test specimen in the bottle.

#### • Enrichment

- Inoculate a first tube with 1 ml of the transport medium.

- Place in incubator at 37°C for 3 - 6 hours.
- Collect an inoculating loop of the culture\* from the surface and inoculate a second tube.
- Place in incubator again under the same conditions as before.

\* *Vibrio cholerae* produces marbled waves and a very delicate veil on the surface of the broth.

### PRECAUTIONS

- The time lapse between the end of preparation of the stock solution (or the 10<sup>-1</sup> dilution in the case of a solid product) and the moment when the dilutions come into contact with the culture medium must not exceed 15 minutes.
- Comply with Good Laboratory Practice.

### PERFORMANCES / QUALITY CONTROL OF THE TEST

The growth performances of the media are verified with the following strains:

| STRAINS                                     | Results after 8h culture at 37°C |
|---|----------------------------------|
| <i>Vibrio cholerae</i>                      | Enrichment                       |
| <i>Vibrio para-haemolyticus</i><br>CIP 75.2 | Enrichment                       |

### QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product. Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

### KEY WORDS

Vibrios / *Vibrio cholerae* / Transport / Development / Rich / Saline / Medium.

### BIBLIOGRAPHY

**DODIN A. (10-11 nov. 82):** Diagnostic du vibron cholérique au laboratoire. Réunion internationale sur les infections intestinales Granada (Spain).