

## R.V.S./broth (Rappaport Vassiliadis Soy)

355-5773  
356-4324

### DEFINITION

Selective enrichment broth used for the detection of *Salmonella* in food products and in water.

### STANDARDS

- **ICH: International Conference on Harmonization.** *Salmonella* – Detection.

### PRINCIPLE

The nutrient substances provided by soy peptone favor the growth of *Salmonella*.

Due to the high concentration of magnesium, the malachite green, the high incubation temperature and the low pH, the medium inhibits other bacteria.

### PRESENTATION

- **Ready to use**  
10 ml x 25 tubes **code 355-5773**
- **Dehydrated**  
500 g **code 356-4324**

### STORAGE

- Ready to use: + 2° to 8°C, in a dark place.
- Dehydrated: + 15° to 25°C, in carefully sealed bottles in a cool, dry place.
- Expiration date and batch number are shown on the package.

### TYPICAL FORMULA

Soy peptone	4.50 g
Sodium chloride	7.20 g
Potassium dihydrogen phosphate	1.26 g
Dipotassium hydrogen phosphate	0.18 g
Anhydrous magnesium chloride	13.58 g
Malachite green	33 mg
Distilled water	1,000 ml
Final pH (25°C) = 5.2 ± 0.2	

Remark: the formula has been adapted to attain the required performance criteria.

### OTHER PRODUCTS REQUIRED (NOT SUPPLIED)

- Diluent(s)
- Distilled water

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

- Scales
- Sterile weighing bags
- Grinder
- Hotplate
- Mixer-homogenizer
- Test tubes (16 x 160 mm) with autoclave-proof stoppers
- Sterile pipettes (0.1 ml, etc)
- Thermostatically-controlled incubator or incubation room, precise to ± 1°C
- Autoclave

### PREPARATION OF DEHYDRATED MEDIUM

#### Always shake well before use

Dissolve 26.8 g (\*) of powder in 1 liter of distilled water. Wait for 5 minutes, then mix until a homogenous suspension is obtained. Heat gently, shaking frequently, then bring to boiling point until completely dissolved. Dispense 10 ml per tube and sterilize in autoclave at 115°C (± 1°C) for 15 minutes.

**Reconstitution ratio: 26.8 g/l**

**500 g of powder makes 18.6 liters of RVS medium.**

### PROTOCOL

- **Preparation of samples**  
According to the standards applicable to the product concerned.
- **Non-selective pre-enrichment**  
According to the standards applicable to the product concerned.
- **Inoculation and incubation**  
Transfer 0.1 ml of pre-enrichment broth to a tube containing 10 ml of Rappaport Vassiliadis Soya (RVS) broth. Incubate at 41.5°C ± 0.5°C for 24 hours. Prolong incubation for a further 24 hours if necessary.
- **Isolation and incubation**  
After incubation, isolate on appropriate selective media, then proceed with identification (according to the procedure described in the standard) if suspected *Salmonella* colonies are present.

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### PRECAUTIONS

- The medium is highly hygroscopic and must be protected from humidity.
- Comply with Good Laboratory Practice.

### QUALITY CONTROL

In view of the current harmonization of pharmacopeias, we recommend that you refer to the certificates of analysis for procedures relating to the quality control (performance and selectivity) of media produced by Bio-Rad.

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

Rappaport-Vassiliadis Soy/*Salmonella*/  
Food products/Water/Detection/  
Magnesium chloride/Malachite green/  
Enrichment broth/Medium.

### BIBLIOGRAPHY

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