**RAPID’Salmonella Capsule / Supplement**

**SCOPE OF APPLICATION**

The RAPID’Salmonella capsule and RAPID’Salmonella Supplement are a selective supplement for addition to Buffered Peptone Water as part of the RAPID’Salmonella method – a short, NF VALIDATION and Nordval-certified protocol (see RAPID’Salmonella technical data sheet), for detection of Salmonella spp. in human and animal food products, and in environmental samples.

**FORMATS**

- **100 RAPID’Salmonella capsules**
  - 100 x QSP 250 ml code 356-4710
- **100 RAPID’Salmonella capsules (10 times concentrated)**
  - 100 x QSP 2.5 Litres code 356-4709
- **RAPID’Salmonella Supplement box**
  - 1 x QSP 100 analyses code 356-4712

**STORAGE / SHELF LIFE / BATCH**

- At +2 – 8°C away from light.
- The expiry date and batch number are indicated on the packaging.

**PRINCIPLE**

The RAPID’Salmonella capsule and RAPID’Salmonella Supplement are a selective supplement for addition to Buffered Peptone Water for carrying out selective salmonella enrichment. The formulation enables highly effective Salmonellae growth, even when stressed, while limiting the growth of interfering flora.

**TYPICAL FORMULA**

<table>
<thead>
<tr>
<th>RAPID’Salmonella Capsule</th>
<th>code 356-4710</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSP 250 ml</td>
<td></td>
</tr>
<tr>
<td>Selective mixture</td>
<td>15 mg</td>
</tr>
<tr>
<td>Excipient</td>
<td>qsp 575 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAPID’Salmonella Capsule (10 times concentrated)</th>
<th>code 356-4709</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSP 2.5 L</td>
<td></td>
</tr>
<tr>
<td>Selective mixture</td>
<td>150 mg</td>
</tr>
<tr>
<td>Dye</td>
<td>3.75 mg</td>
</tr>
<tr>
<td>Excipient</td>
<td>qsp 575 mg</td>
</tr>
</tbody>
</table>

**RAPID’Salmonella Supplement box**

- **QSP 100 analyses** code 356-4712
- Selective mixture 1500 mg
- Dye 37.5 mg
- Excipient qsp 5.75 g

**PRODUCT(S) REQUIRED (NOT PROVIDED)**

- Buffered peptone water
  - 6 x 225 ml bottles (ex. code 355-4170)
  - 500 g (ex. code 356-4684)
  - 5 x 2.3 l bags (ex. code 355-5789)
  - 2 x 5 l bags (ex. code 355-5790)

- RAPID’Salmonella medium
  - 90 mm x 20 boxes (code 356-3961)
  - 90 mm x 100 boxes (code 356-3962)
  - 500 g (code 356-4705)

**Preparation of samples by the alternative RAPID’Salmonella method – short protocol**

Sample preparation with direct addition of the capsule supplement in the enrichment broth

Note: In the context of NF VALIDATION mark, no samples of over 25 grams were tested.

Dilute \( \eta \) g or \( \eta \) mL of the sample in 9 x \( \eta \) mL Buffered Peptone Water. Example: dilute 25 g or 25 mL of the sample in 225 mL Buffered Peptone Water and dilute to 1/10th.

ISO standard 6579 specifies how to prepare the stock suspension (cocoa, acid foods etc.).

Homogenise in a Stomacher type blender. Open a RAPID’Salmonella, QSP 250 ml capsule (code 356-4710) and pour the contents directly into the broth.

Homogenise by agitating vigorously.

Note: Either the whole capsule or its contents only can be added before the stomacher phase. In order to make handling easier, we recommend opening the capsule and pouring out the contents (see PRECAUTIONS FOR USE).
Sample preparation with addition of the capsule supplement as a concentrated solution to the enrichment broth

The capsule contents can be diluted in Buffered Peptone Water or Sterile Distilled Water first, for incorporation in liquid form.

- Dilute $\eta$ g or $\eta$ mL of the sample in $9 \times \eta$ mL of Buffered Peptone Water.
- Homogenise in a Stomacher blender.
- Where RAPID’Salmonella QSP 250 ml capsules (code 356-4710) are used: Open n capsules and pour the contents directly into $n \times 10$ mL Buffered Peptone Water to obtain a concentrated supplement solution.
  Add $\eta \times 0.4$ml of the concentrated supplement solution to the sample to be analysed.
  Homogenise by agitating vigorously.

- Where RAPID’Salmonella QSP 2.5 Litre capsules are used (code 356-4709): Open n capsules and pour their contents directly into an empty recipient. Fill with $n \times 10$ mL Buffered Peptone Water or $n \times 10$ mL of Sterile Distilled Water.
  Homogenise by agitating vigorously to obtain a red concentrated solution.
  Add $\eta \times 0.04$ml of the concentrated supplement solution to the sample diluted in the Buffered Peptone Water.
  Homogenise by agitating vigorously.

- Where RAPID’Salmonella Supplement (code 356-4712), 1 x QSP 100 analyses are used: Open the box and fill with 100 mL of Buffered Peptone Water or Sterile Distilled Water. Homogenise by agitating vigorously to obtain a red concentrated solution.
  Add $\eta \times 0.04$ml of the concentrated supplement solution to the sample diluted in the Buffered Peptone Water.
  Homogenise by agitating vigorously.

Example for a 10g sample:
- Dilute the 10g sample in 90 mL Buffered Peptone Water.
- Homogenise using a Stomacher type blender.
- Dilute 1 RAPID’Salmonella QSP 250 ml capsule (code 356-4710) in 10 mL Buffered Peptone Water to obtain a concentrated supplement solution
- Add 4 ml of concentrated supplement solution to the 90 ml Buffered Peptone Water diluent + sample in order to achieve the correct capsule dilution ratio.

NB.: The concentrated solution, once reconstituted with Buffered Peptone Water or Sterile Distilled Water can be stored for 1 week at ambient temperature, or at +2-8°C.

PRECAUTIONS FOR USE
- Good Laboratory Practice must be observed. (EN ISO 7218)
- If the whole capsule is added to the Buffered Peptone Water, sterile tweezers must be used to add the capsule to the bag. We recommend that you check that the capsule actually opened during the stomaching stage.
- If the capsule contents are handled with the fingers, it cannot be added to the enrichment broth due to the risk of contamination.
- The RAPID’Salmonella capsule and RAPID’Salmonella Supplement contain selective agents and an excipient. Selective agents dissolve very well. The excipient however, remains in suspension and may create a deposit when the contents of the capsule are diluted in a small quantity of Buffered Peptone Water or Sterile Distilled Water. Always shake well therefore before using the concentrated solution.

QUALITY CONTROL
All products manufactured and sold by Bio-Rad are subject to a quality assurance system, from receipt of raw materials to commercialisation of the finished products. Each finished product batch is subject to quality control and is only marketed if it is compliant with the applicable acceptance criteria.

Documentation relating to batch production and control is kept on file.

<table>
<thead>
<tr>
<th>MICRO-ORGANISMES</th>
<th>Culture des micro-organismes en 24 heures à 37°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmonella Enteritidis</td>
<td>Colonies magenta</td>
</tr>
<tr>
<td>ATCC 13076</td>
<td></td>
</tr>
<tr>
<td>Salmonella Typhimurium</td>
<td>Colonies magenta</td>
</tr>
<tr>
<td>ATCC 14028</td>
<td></td>
</tr>
<tr>
<td>Escherichia coli</td>
<td>Inhibition totale ou partielle</td>
</tr>
<tr>
<td>ATCC 25922</td>
<td>Colonies non colorées</td>
</tr>
<tr>
<td>Enterococcus faecalis</td>
<td>Inhibition totale</td>
</tr>
<tr>
<td>ATCC 19433</td>
<td></td>
</tr>
</tbody>
</table>

KEYWORDS
RAPID’Salmonella/Capsule/Salmonella/Food products/Detection/Chromogenic/Medium.
BIBLIOGRAPHY
