

## Product Information

### 84370 Salmonella Enrichment Broth acc. to Rappaport

For the selective enrichment of *Salmonella*, with the exception of *S. typhi*, from fecal specimens, food and other material acc. to Rappaport (1956, 1959).

#### Composition:

Ingredients	Grams/Litre
Peptone	5.0
Sodium chloride	8.0
Dipotassium hydrogen phosphate	0.8
Magnesium chloride	40.0
Malachite Green	0.12

Final pH 6.0 +/- 0.2 at 25°C

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C. The broth can be kept in the refrigerator for 1 month.

#### Directions :

Dissolve 54 g in 1 litre distilled water. Pour into tubes and autoclave carefully at 115°C for 20 minutes.

#### Principle and Interpretation:

The malachite green and magnesium chloride concentrations are higher than those of the Rappaport Vassiliadis Broth, modified (17173). Peptone is a nitrogen and carbon source. Sodium chloride is for osmotic balance and magnesium chloride raises the osmotic pressure in the broth. Malachite green and magnesium chloride largely suppress the growth of the accompanying microbial flora found in the intestine, but not the growth of most *Salmonellae*. Only *S. typhi*, *S. choleraesuis* and *Shigellae* are sensitive to malachite green and are usually inhibited. Lowering pH to 5.2 increases selectivity. Dipotassium hydrogen phosphate is the buffering agent in the medium. Novobiocin (40 mg/litre) can be added to enhance the inhibition of accompanying flora.

Cultural characteristics after 18-24 hours at 35°C.

Organisms (ATCC)	Recovery
<i>Salmonella enteritidis</i> (13076)	+++
<i>Salmonella typhi</i> (6539)	-/+
<i>Salmonella typhimurium</i> (14028)	+++
<i>Escherichia coli</i> (25922)	-/+

References:

1. E. Jacqmain, G. Daras, Recherche de la presence de Salmonella dans des aliments en poudre, Belg. J. Food Chem. Biotechnol., 42, 75 (1987)
2. F. Rappaport, et al., J. Clin. Pathol., 9, 261 (1956)
3. F. Rappaport, et al., Appl. Microbiol., 7, 63 (1959)

**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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