Reference: 600834ZA **Technical Data Sheet**

Product: # Rappaport Vassiliadis Broth - 10ml

Specification

Liquid medium for the selective enrichment of *Salmonella* in foodstuffs and other samples, according to ISO and FIL-IDF standards.

Presentation

	Packaging Details	Shelf Life	Storage
20 Tubes Tube 16 x 113 mm with: 10 ± 0.3 ml	16x113 mm glass tubes, ink labelled, metal-Non injectable cap. - 20 tubes per box	10 months	8-25 ºC

Composition

Composition (g/l):

Soy peptone	4.500
Sodium chloride	7.200
Monopotassium phosphate	1.260
Dipotassium phosphate	0.180
Magnesium chloride anhydrous	13.400
Malachite Green	0.036

Description /Technique

Description:

The Rappaport Vassiliadis medium complies with the recommendations of the APHA for the examination of food.
This culture medium is a modification of the R10 Medium (from Rappaport *et al.*) or RV Broth (from Vassiliadis *et al.*) by van Schothorst & Renaud. The modifications are an adjustment in the magnesium chloride concentration and the buffering capacity of the medium to aid pH maintenance during storage. It shows a higher selectivity towards *Salmonella* and produces better yields than other similar media, especially after preliminary enrichment and at an incubation temperature of 41 ± 0,5ºC.
Malachite green, low pH and magnesium chloride inhibit the growth of microorganisms normally found in the intestine but do not affect the proliferation of most salmonellae. As malachite green inhibits the growth of *Shigella*, other culture methods may need to be used to isolate this organism. The addition of soy peptone enhances the growth of *Salmonella*.

Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.
Inoculate asseptically the tubes with the prepared sample or its dilution in a proportion 1/10 (V/V).
Incubate the tubes tightly closed aerobically at 41 ± 0,5 ° C for 24h ± 3 h..
(Incubation times, temperature and sample volumes may vary depending on the sample, on the specifications,...)
Read the turbity (growth indicator) and inoculate any confirmatory, secondary medium by streaking methodology or by spiral method, like XLD, BPLS,... to confirm results after proper incubation, enumerate all the colonies that have appeared onto the surface of the secondary agar.
Presumptive isolation / recovery of Salmonella must be confirmed by further microbiological and biochemical tests.
Each laboratory must evaluate the results according to their specifications.
Calculate total microbial count per ml of sample by multiplying the average number of colonies per plate by the inverse dilution factor if streaked a diluted sample. Report results as Colony Forming Unit (CFU's) per ml or g along with enrichment and secondary media used, incubation time and temperature.

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Quality control

Physical/Chemical control

Color : Blue pH: 5.2 ± 0.2 at 25ºC

Microbiological control

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10^4-10^6 (selectivity).

Microbiological control according to ISO 11133:2014/A1:2018.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation 41,5±1 ºC, reading 24h ± 3h. Confirm in XLD (Pr) y TSA (Select.)

Microorganism	Growth
Enterococcus faecalis ATCC® 29212, WDCM 00087	Inhibited. Confirm in TSA at 37ºC±1 reading 24 ± 3h
Escherichia coli ATCC® 25922, WDCM 00013	Partial Inhibition. Confirm in TSA at 37ºC±1 reading 24 ± 3h.
S. typhimurium (14028) + E. coli (8739) + Ps. (27853)	*Salmonella* coln. charact. in XLD (37ºC±1 / 24 ± 3h) ≥ 10 CFU.

Sterility Control

Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.
Check at 7 days after incubation in same conditions.

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