Modified Rappaport Vassiliadis Medium

Intended Use
Modified Rappaport Vassiliadis Medium is recommended as a selective enrichment medium for the isolation of *Salmonella* species from food and environmental specimens.

Summary
Rappaport *et al*., with magnesium chloride hexahydrate was modified by Vassiliadis *et al*., by lowering the concentration of Malachite green and raising the incubation temperature to 43°C. This medium is recommended as the selective enrichment medium for isolation of *Salmonella* from food and environmental specimens.
The test specimen is added to Buffered Peptone Water and incubated at 35°C for 16 - 20 hours. This pre-enriched peptone water culture is inoculated into Modified Rappaport Vassiliadis Medium and incubated at 42±1°C for 24-48 hours and further subcultured on Brilliant Green Agar.

Principle
Peptone from Soyabean provides the essential nutrients for the growth of bacteria. Phosphate salts act as buffer to maintain the pH. Magnesium chloride maintains the high osmotic pressure and *Salmonella* generally survive at little high osmotic pressure. Malachite green inhibits other microorganisms other than *Salmonella*.

Formula*
Ingredients	**g/L**
Peptone from Soyabean	5.0
Sodium Chloride	8.0
Monopotassium Phosphate	1.6
Magnesium Chloride Hexahydrate	40.0
Malachite Green	0.04

Final pH (at 25°C): 5.2 ± 0.2
*Adjusted to suit performance parameters.

Storage and Stability
Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Water samples; Food samples.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 30.07 g of (the equivalent weight of dehydrated medium per litre) the powder in 1000 mL purified / distilled water and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 115°C (10 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Pale green to light blue homogeneous free flowing powder.
Prepared Appearance: Greenish blue to blue coloured, clear solution without any precipitate in tubes.
Cultural Response: Cultural characteristics observed after an incubation at specified temperature for 24-48 hours and further subcultured on Brilliant Green Agar, Modified (201020270100).

Organism (ATCC)	Growth at 37°C	Growth at 42 ± 1°C	Incubation period
Salmonella enterica subsp. *enterica* serovar *Typhimurium* (14028)	Good	Good	24 hours
Salmonella Typhi (6539)	Poor	Poor	24 hours
Salmonella Paratyphi B (8759)	Good	Good	24 hours
Escherichia coli (8739)	Partial Inhibition	Poor	24 hours

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Rappaport, Konforti and Navon. 1956. J. Clin. Pathol. 9:261.
2. Vassiliadis P. et al, 1976a, Annales de Microbiologie (Institut Pasteur), 127B : 195.
3. International Organization for Standardization (ISO), 1993, Draft ISO/DIS 6579.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201131590500	Dehydrated Culture Media	500 g