

TECHNICAL DATA SHEET

Rappaport Vassiliadis Medium

Principle

The Rappaport Vassiliadis Medium is the modification of the R10 medium (Rappaport et.al. 1956) or RV broth (Vassiliadis et.al. 1978). The media composed of soya peptone, magnesium chloride, sodium chloride, dipotassium phosphate, potassium dihydrogen phosphate, and malachite green. Soya peptone serves carbon and nitrogen sources for growth requirements. Magnesium chloride raises the osmotic pressure in the medium. The malachite green and magnesium chloride together act as selective agent and inhibit the growth of other organisms than *Salmonellae*. The low pH of the medium (5.2 ± 0.2 at 25°C), combined with the presence of malachite green and magnesium chloride, provides selectivity to highly resistant *Salmonella spp.* The phosphate buffers the medium.

Use: For enrichment of *Salmonellae*, based on its ability to multiply selectively at high osmotic pressure, low pH and at 43°C , with modest nutritional requirements.

Contents*

Ingredients	Gram/Litre
Soya Peptone	4.500
Magnesium Chloride	36.000
Sodium Chloride	7.200
Potassium Dihydrogen Phosphate	1.440
Malachite Green	0.036
pH at 25°C	5.2 ± 0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 49.17 grams in 1000 ml distilled water. Sterilize by autoclaving at 10 lbs pressure (115°C) for 15 min, cool it to $42-45^{\circ}\text{C}$ and inoculate test sample aseptically.

Specimens types analyzed

Pharmaceutical samples, clinical and non-clinical samples etc

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Pale yellow with blue ting colored free flowing, homogeneous powder
Reaction of 4.91 % solution	5.2 ±0.2 at 25 °C
pH	5.00- 5.40
Color and clarity of ready medium	Greenish blue colored opalescent solution
Growth Promotion properties	Best at ≤ 100 CFU at 42-43 °C for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 42-43 °C for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response: Cultural characteristics are observed after incubation at 33–37°C for 18-24 hours. After enrichment in the Rappaport Vassiliadis Medium, recovery is carried out on Xylose Lysine Deoxycholate Agar (RDM-XLDA-01). Inoculum 50-100 CFU.

Organism	ATCC	Growth	Recovery	Colony color (On XLD Agar)
<i>Salmonella typhimurium</i>	14028	Luxuriant	≥ 70%	Red with black centers
<i>Salmonella Typhi</i>	6539	Luxuriant	≥ 70%	Red with black centers
<i>Salmonella Enteritidis</i>	13076	Luxuriant	≥ 70%	Red with black centers
<i>Escherichia coli</i>	25922	Luxuriant	≥ 70%	Yellow

This document has been produced electronically and it is valid without signature.

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). Handbook of media for environmental microbiology. CRC press.
2. Difco Manual (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), Standard methods for the examination of water and wastewater. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.
4. The Japanese Pharmacopoeia, 17th Ed. (2016), The Ministry of Health, Labour And Welfare.
5. The United States Pharmacopoeia, (2014), The United States Pharmacopeial Convention. 12601 Twinbrook Parkway, Rockvukke, MD 20852.
6. Rappaport, F., N. Konforti, and B. Navon (1956) A new enrichment medium for certain Salmonellae
J. Clin. Pathol. 9:261-266.
7. Vassiliadis, P., D. Trichopoulos, A. Kalandidi, and E. Xirouchaki (1978), Isolation of Salmonellae from sewage with a new procedure of enrichment. J. Appl. Bacteriol. 44:233-239.
8. Van Schothorst M., Renauld A. and VanBeek C., (1987), Food Microbiol., 4:1

This document has been produced electronically and it is valid without signature.

www.oxfordlabchem.com

OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.

This document has been produced electronically and it is valid without signature.

www.oxfordlabchem.com