

TECHNICAL DATA SHEET

Modified Semisolid Rappaport Vassiliadis Medium Base

Principle

Modified Semisolid Rappaport Vassiliadis Medium Base (MSRV) recommended by ISO 6579-1:2014 for microbial testing of *Salmonella* species from food and environmental samples. The media composed of enzymatic digest of animal and plant tissue and acid hydrolysate of casein serves carbon, nitrogen sources, essential amino acids and vitamins for growth requirements. Sodium chloride maintains osmotic balance and phosphate buffers the medium. 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* species. The along with malachite green, magnesium chloride the Novobiocin act as selective agent by limiting the motility of other organisms than *Salmonellae*. Less concentration of agar, which make it very soft and allow the mobile bacteria to migrate. The inoculum is stabbed into the center of a semisolid agar deep using a sterile inoculating needle.

Use: For the detection of motile *Salmonella* species from food, faeces and environmental specimens.

Contents*

Ingredients	Gram/Litre
Enzymatic digest of animal and plant tissue	4.600
Acid hydrolysate of casein	4.600
Sodium Chloride	7.300
Potassium dihydrogen phosphate (KH_2PO_4)	1.500
Magnesium chloride hexahydrate ($\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$)	40.000
Malachite green oxalate	0.040
Agar	2.700
pH at 25°C	5.1-5.40

* Formula adjusted for optimum performance and parameters

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



Directions: Dissolve 39.47 grams in 1000 ml distilled water, boil to dissolve all ingredients by continuous stirring. Do not autoclave, cool to 40-45 °C add selective agent such as Novobiocin 10 mg/ 1000 ml and distribute in test tubes/ Petri plates allow to cool and inoculate test sample aseptically.

Specimens' types analyzed

Pharmaceutical samples, clinical and non-clinical samples etc.

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 2.71 % 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 41.5±1°C for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 41.5±1°C for 18-48 h
Negative control	Performed using sterile distilled water

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



Different Microbial Response: Cultural characteristics are observed after incubation (Stab line/drop) at 41.5°C ± 1°C for 24-48 hours. Inoculum 50-100 CFU.

Organism	ATCC	Growth	Motility	Growth Appearance
<i>Salmonella typhimurium</i>	14028	Luxuriant	Positive	Turbid zone extending out from inoculated stabline/drop.
<i>Salmonella abony</i>	NCTC-6017	Luxuriant	Positive	Turbid zone extending out from inoculated stabline/drop.
<i>Salmonella enteritidis</i>	13076	Luxuriant	Positive	Turbid zone extending out from inoculated stabline/drop.
<i>Escherichia coli</i>	25922	Luxuriant	Negative	Turbid zone restricted to inoculum site
<i>Escherichia coli</i>	8739	Luxuriant	Negative	Turbid zone restricted to inoculum site
<i>Enterococcus faecalis</i>	19433	Inhibited	-	-

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.

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



Reference

1. **Difco Manual (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.**
2. **International Organization for Standardization 6579-1:2017(E), Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella.**
3. **Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.**
4. **Rappaport, F., N. Konforti, and B. Navon (1956) A new enrichment medium for certain Salmonellae J. Clin. Pathol. 9:261-266.**

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