Semisolid RV Medium w/0.9% Agar

M1998

Intended Use:

For the enrichment of *Salmonellae* under high osmotic pressure, low pH and at 43°C with modest nutritional requirements.

Composition**

Ingredients	g / L
Soya peptone	4.500
Yeast extract	2.500
Sodium Chloride	7.200
Potassium dihydrogen phosphate	1.440
Magnesium chloride	36.00
Malachite green	0.036
Dextrose (Glucose)	1.000
Agar	9.000
Final pH (at 25°C)	5.2 ± 0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 61.68 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Dispense in tubes or flasks or as desired. Sterilize by autoclaving at 10 lbs pressure (115°C) for 15 minutes.

Principle And Interpretation

Semisolid RV Medium w/0.9% agar can be used for enrichment of Salmonellae from human faeces without pre-enrichment (1,2,3). Similar medias are prescribed for the detection of motile *Salmonella* species from food and environmental specimens (4).

Soya peptone and yeast extract provides the nitrogenous and carbonaceous substances and other essential growth nutrients. Sodium chloride maintains the osmotic balance. Malachite green and high concentration of magnesium chloride inhibits gram positive bacteria. Potassium phosphate buffers the medium well. This medium is used for enrichment of *Salmonella* and incubated at 43°C.

Type of specimen

Clinical samples - Faeces; Food samples.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).
For food samples, follow appropriate techniques for sample collection and processing as per guidelines (7).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. The medium should be incubated at 43°C only.
2. Further biochemical identification of organisms is required for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to light blue homogeneous free flowing powder

Gelling

Firm comparable with 0.9% Agar gel.

Colour and Clarity of prepared medium

Blue coloured clear to slightly opalescent gel forms in tubes.

Reaction

Reaction of 6.17% w/v aqueous solution at 25°C. pH : 5.2 ± 0.2

pH

5.00-5.40

Cultural Response

Cultural characteristics observed after an incubation at 42-43°C for 18 - 24 hours.

Organism	Inoculum (CFU)	Growth
Salmonella Enteritidis ATCC 13076 (00030*)	50-100	good-luxuriant
Salmonella Typhimurium ATCC 14028 (00031*)	50-100	good-luxuriant
Salmonella Typhi ATCC 6539	50-100	good-luxuriant
Escherichia coli ATCC 25922 (00013*)	50-100	none-poor

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

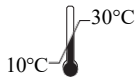
Reference

1.Peterz, M., et al., (1989). J.Appl. Bact. 66,523
2.Van Schothorst, M., et al., (1987). Food Microbiol. 4,11
3.Van Schothorst, M., et al., (1983). J.Appl. Bact.54, 209
4.De Smedt J.M., Balderdijk R., Rappold H. and Lautenschlaeger D., 1986, J. Food Prot., 49:510.
5.Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
6.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
7.Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

Revision : 03/2024

HiMedia Laboratories Pvt. Limited,
Plot No.C-40, Road No.21Y,
MIDC, Wagle Industrial Area,
Thane (W) -400604, MS, India

IVD *In vitro* **diagnostic medical device**



Storage temperature

EC REP

CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

CE Marking

Do not use if package is damaged

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory,diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.