

RVS Broth

Catalog :HB4198-24

RVS Broth is used for selective enrichment of salmonella in food.

Approximate Formula:

Ingredients	gm/liter
Enzymatic Digest of Soya	4.5
Sodium Chloride	7.2
Potassium Dihydrogen Phosphate	1.26
Dipotassium Phosphate	0.18
Magnesium Chloride Hexahydrate	28.6
Malachite Green	0.036
Final pH5.2±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 27.1g of the medium in 1000ml of distilled water. Mix thoroughly. Heat with frequent agitation to completely dissolve the powder. Dispense into test tubes. Sterilize in an autoclave at 121°C for 15 minutes.

Principle and Interpretation:

RVS Broth contains enzymatic digest of soya as the carbon and nitrogen source for general growth requirements. Magnesium chloride raises the osmotic pressure in the medium. Sodium chloride maintains osmotic balance. Dipotassium phosphate and potassium dihydrogen phosphate are buffering agents. Malachite green is inhibitory to organisms other than salmonellae. The low pH of the medium, combined with the presence of malachite green and magnesium chloride, helps to select for the highly resistant *Salmonella* spp.

Appearance:

Dehydrated medium is a free-flowing blue green powder. The prepared medium is a kind of blue green transparent fluid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

RVS Broth must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Cultural characteristics observed after an aerobic incubation at 41.5 ± 1°C for 24 ± 3 hours.

Microorganism	Strains Number	Inoculum (CFU)	Recovery
<i>Salmonella typhimurium</i>	ATCC14028	10-100	Good
<i>Salmonella enteritidis</i>	CMCC (B) 50760	10-100	Good
<i>Staphylococcus aureus</i>	ATCC6538	100-1000	Inhibition
<i>Escherichia coli</i>	ATCC25922	10-100	Partial to complete inhibition

References

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The nationalformulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. European Directorate for the Quality of Medicines and Healthcare. 2008. The European pharmacopoeia, 6th ed., Supp. 1, 4-1-2008, online. European Directorate for the Quality of Medicines and Healthcare, Council of Europe, 226 Avenue de Colmar BP907-, F-67029 Strasbourg Cedex 1, France.