



Yeast Extract Rose Bengal Broth Base

RDM-YRBB-01

Principle

Yeast extract rose bengal broth base is composed of yeast extract, disodium phosphate, bile salts, sodium chloride, magnesium Sulphate, sodium pyruvate and rose bengal. Yeast extract rose bengal broth is formulated as recommended in APHA for enrichment of *Yersinia species* from foods. Yeast extract provides nitrogen, carbon, vitamins, amino acids and other trace nutrients required for the growth of microorganisms. Bile salts used as selective agents for the isolation of gram-negative microorganisms, inhibiting gram-positive cocci. Disodium phosphate acts as buffering agent. Sodium chloride maintains osmotic equilibrium of the medium. Magnesium sulfate provides ions for metabolic reactions. Sodium pyruvate increases the recovery of stressed cells and enhances growth of *Yersinia species*. Rose Bengal is a selective agent, inhibits bacterial growth.

Use: Recommended for the cold enrichment, for the recovery of *Yersinia species* from food samples.

Contents*

Ingredients

	Gram/Litre
Yeast Extract	5.000
Disodium Phosphate	17.250
Bile Salts	2.000
Sodium Chloride	1.000
Magnesium Sulphate	0.010
Sodium Pyruvate	1.000
Rose Bengal	0.040
pH at 25°C	7.9 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 26.50 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 min, cool it to room temperature and inoculate test sample aseptically.

Note: For more selectivity dissolve 26.50 grams in 900 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 min, cool it to room temperature and add 100 ml of 4% filter sterilized sorbose solution. Mix well and dispense aseptically as desired.

Specimens types analyzed

Food and dairy samples, environmental 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	Pinkish beige colored free flowing, homogeneous powder
Reaction of 2.65% solution	7.9 ±0.2 at 25 °C
pH	7.70- 8.10
Color and clarity of ready medium	Pink colored opalescent solution
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 °C for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 °C for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Cultural characteristics observed after incubation at 4°C for 9-10 days or at 10°C for 3 days with added sorbose solution.

Organism	ATCC	Inoculum	Growth	Incubation period
<i>Yersinia enterocolitica</i>	27729	50-100	Good	3 to 7 days

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

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. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), (2003), *Manual of Clinical Microbiology*, 8th Ed., American Society for Microbiology, Washington, D.C.
4. Speck M. L., (Ed.), (1984), *Compendium of Methods for the Microbiological Examination of Foods*, 2nd Ed., APHA, Washington, D.C.

Disclaimer

The information contained in the technical data sheet is to the best of our knowledge is accurate and true based on the research and development work carried out by **ReadyMED**[®], Chaitanya Agro Biotech, Malkapur, Maharashtra. The products are neither intended for any therapeutic use for animal or human nor for any other *in-vivo* applications. The **ReadyMED**[®] products are only meant to be used for the laboratory, diagnostic, research, or further manufacturing purpose only. These technical outcomes should not be considered as the warranty of any kind expressed or implied, and no liability is accepted for infringement of any patent.

CHAITANYA AGRO BIOTECH PVT. LTD. An ISO 11134:2014, ISO 13485:2016, ISO 9001:2015 CE, CIN NO.: U24210MH1995PTC095220S,
S. No. 120/2, Laxmi Nagar, Umbarnala Road, Malkapur-443101, Dist.: Buldana (M.S.) India. Customer Care +91-8669083859
rdmsales@chaitanyagroupindia.com, mkt.cabt@chaitanyagroupindia.com, www.chaitanyagroupindia.com