SABOURAUD DEXTROSE BROTH

SDBR-0EP-500

- **Principle**

Sabouraud Dextrose Broth is a liquid medium formulated for the cultivation and enrichment of yeasts, moulds and aciduric bacteria. It is widely used in pharmaceutical microbiology and is recommended by the United States Pharmacopeia (USP) for microbial limit testing of non-sterile pharmaceutical products and raw materials. The medium is prepared in accordance with harmonised pharmacopeial requirements.

The formulation contains a balanced mixture of meat and casein peptones in equal proportions, providing nitrogenous and carbonaceous compounds, amino acids, vitamins and other essential nutrients required for fungal growth. Dextrose monohydrate serves as a readily available energy source. The relatively high concentration of dextrose, together with the acidic pH of the medium, promotes the growth of yeasts and moulds while inhibiting many contaminating bacteria that may be present in pharmaceutical and clinical samples. These characteristics make the medium particularly suitable for the recovery of fungi from materials with low levels of microbial contamination.

- **Regulatory compliance**

This product is manufactured under a quality management system in accordance with ISO 9001 and ISO 13485, and its formulation and quality control comply with applicable international standards, such as ISO 11133, where relevant.

For this specific medium, the formulation and performance requirements are aligned with the harmonised principles of the USP for microbial limit testing.

- **Composition**

Ingredients	**g/L**
Meat and Casein Peptone	10.00
Dextrose Monohydrate	20.00

- **Preparation**

Dissolve 30 grams in 1,000 ml distilled water. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 min, cool it to 42-45 °C and inoculate test sample aseptically.

- **Applications and use**

Recommended for the cultivation, enrichment and detection of yeasts, moulds and aciduric microorganisms in pharmaceutical products, raw materials and related samples, in accordance with harmonised USP microbial limit testing procedures. It may also be used in general mycological studies where liquid enrichment of fungal organisms is required prior to further identification or enumeration.

- **Quality control**

Solubility	w/o rests
Appearance	Fine powder
Colour of the dehydrated medium	Beige
Colour of the prepared medium	Amber
Final pH (25 °C)	5.6 ± 0.2

- **Microbiological test**

Cultural characteristics observed after incubation at 25±2 °C for 3-5 days. Inoculum 50-100 CFU.

Microorganism	ATCC	Growth
Candida albicans	10231	Luxuriant
Saccharomyces cerevisiae	9763	Luxuriant
Aspergillus brasiliensis	16404	Luxuriant

- **Storage**

The product is highly hygroscopic; keep the container always closed 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. Temp. Min.:2 °C Temp. Max.:25 °C.

Note: Sterilize media immediately after reconstitution.

- **Bibliography**

Atlas, R. M. (2005). Handbook of media for environmental microbiology. CRC press.

Difco Manual (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.

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.

The United States Pharmacopoeia, (2014), The United States Pharmacopeial Convention. 12601 Twinbrook Parkway, Rockvukke, MD 20852.

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.