

## Sabouraud Dextrose Broth (Harmonized)

### Intended Use

Sabouraud Dextrose Broth is used for isolation and cultivation of Yeasts, Moulds and Aciduric Bacteria from pharmaceutical products in accordance with microbial limit testing by harmonized methodology of USP/EP/BP/JP/IP.

### Summary

Sabouraud Dextrose Broth is Carlier's modification of the formulation described by Sabouraud for the cultivation of fungi, particularly those associated with skin infections. It is used in qualitative procedures for cultivation of pathogenic and non-pathogenic fungi, particularly dermatophytes. Carlier showed that this medium gives reliable results with *Microsporum audouini*, *M. canis*, *Trichophyton mentagrophytes*, *T. flavum*, *T. rubrum* and *Candida albicans*. The fungi maintain their typical cultural appearance and thus may be readily identified according to the standard macroscopic characters described by Sabouraud. Sabouraud Dextrose Broth is recommended in the Bacteriological Analytical Manual for cosmetics testing.

### Principle

Mixture of peptic digest of animal tissue and pancreatic digest of casein (1:1) provides nitrogenous compounds, carbon and other growth factors. Dextrose is the carbohydrate source. The low pH of approximately 5.6 is favourable for the growth of fungi, especially dermatophytes and is slightly inhibitory to contaminating bacteria. Various antibiotics can be added to this medium for bacterial inhibition as well as to make it selective for the isolation of pathogenic fungi from material containing large number of other fungi or bacteria.

### Formula \*

Ingredients	g/L
Dextrose	20.0
Mixture of Peptic Digest of Animal Tissue and Pancreatic Digest of Casein (1:1)	10.0
Final pH (at 25°C)	5.6 ± 0.2

\*Adjusted to suit performance parameters.

### Directions

1. Bring the Sabouraud Dextrose Broth (Harmonized) vial to the room temperature 22°C-30°C.
2. Use Sabouraud Dextrose Broth (Harmonized) as per required application.

### Quality Control

**Appearance:** Light amber coloured, clear solution.

**Growth Promotion Test:** Growth promotion is carried out in accordance with the harmonized method of USP/EP/BP/JP/IP and growth is observed after an incubation at 30°C-35°C for ≤ 5 days. Subculturing is carried out using Sabouraud Dextrose Agar after enrichment in Sabouraud Dextrose Broth (Harmonized) and incubated at 30°C-35°C for 24-48 hours.

**Growth Promoting Properties:** The test results observed are within the specified temperature and the shortest period of time, inoculating ≤ 100 cfu (at 30°C-35°C for ≤ 5 days).

Organisms (ATCC)	Growth
<i>Candida albicans</i> 3147 (10231)	Good
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

**Note:** Inoculum cfu for good growth is 10-100.

### Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Good laboratory practices and hazard precautions must be observed at all times.
3. After use media containers, prepared plates, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.
6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

#### **Storage and Stability**

1. Store the ready to use Sabouraud Dextrose Broth (Harmonized) at 15°C-25°C in a cool, dry place away from light state and local environmental regulations.
2. Stability of the kit is as per expiry date mentioned on the label.

#### **Warranty**

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

#### **Reference**

1. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention.,,Rockville, MD.
4. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
5. Japanese Pharmacopoeia, 2008.
6. British Pharmacopoeia, 2011, The Stationery Office British Pharmacopoeia.
7. Bacteriological Analytical Manual, 8<sup>th</sup> Edition, Revision A, 1998. AOAC, Washington D.C.
8. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Yolken RH (editors) 2003, Manual of Clinical Microbiology, 8<sup>th</sup> ed., ASM, Washington, D.C.
9. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

#### **Product Presentation:**

<b>Cat. No.</b>	<b>Product Description</b>	<b>Pack Size</b>
203190520100	Bottle Media	100 mL

#### **Disclaimer**

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.