

## P6685 Potato Dextrose Broth NutriSelect® Basic

Cultivation of bacteria, fungi, yeast and molds.

### Composition:

| Ingredients             | Grams/Litre |
|-------------------------|-------------|
| Dextrose                | 20.0        |
| Potatoes, infusion from | 4.0         |

Final pH 4.8 +/- 0.5 at 25°C

Store dehydrated powder below 30°C in a tightly closed container and the prepared medium at 2-8°C. Protect from moisture and light by keeping container in a low humidity environment. Use before expiry date on the label.

Appearance(color): Off white to yellow to beige, free flowing powder

Color and Clarity: Light amber coloured clear to slightly opalescent solution in tubes

### Directions:

Solve 24.0 g in 1 litre distilled water. Autoclave 15 minutes at 121°C.

### Principle and Interpretation:

Potato Dextrose Broth is recommended by APHA (1) and F.D.A. (2) for plate counts of yeasts and moulds in the examination of foods and dairy products (3). Potato Dextrose Broth is also used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production (4).

The potato infusion supplies nutrients necessary to enhance sporulation and pigmentation production. Potato infusion and dextrose promote luxuriant fungal growth. Adjusting the pH of the medium by tartaric acid to 3.5 is favorable for growth of fungi, but inhibits the growth of bacteria that may interfere with recovery of yeast and molds. Heating the medium after acidification should be avoided.

Cultural characteristics observed after an incubation of 4-5 days at 25-30°C.

| Organisms (ATCC/WDCM)                         | Inoculum (CFU) | Growth | Ascospore formation |
|---|----------------|--------|---------------------|
| <i>Candida albicans</i> (10231/00054)         | 50-100         | +++    | negative            |
| <i>Saccharomyces cerevisiae</i> (9763/00058)  | 50-100         | +++    | negative            |
| <i>Aspergillus brasiliensis</i> (16404/00053) | 50-100         | +++    | negative            |



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## References:

1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
2. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
3. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
4. MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore

## Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

