



PRODUCT SPECIFICATION SHEET

Potato Dextrose Broth (DM216)

Intended Use

Potato Dextrose Broth (DM216) is used for the cultivation of fungi.

Product Summary and Explanation

Potato Dextrose Broth is a general purpose broth for yeasts and molds. The low pH of this medium inhibits bacterial growth. Potato Dextrose Broth is the same formula as Potato Dextrose Agar, but agar has been omitted. 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⁾

Principles of the Procedure

Potato Dextrose Broth is composed of Potato Infusion Solids and Dextrose that encourage luxuriant fungal growth. Adjusting the pH of the medium by tartaric acid to 3.5, inhibits the bacterial growth. Heating the medium after acidification should be avoided.

Formula / Liter

Ingredients	Gms / Litre
Potato Infusion Solids	200.0
Dextrose	20.0
Final pH: 5.1 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 24 g of the medium in 1000 ml of distilled water.
2. Heat to completely dissolve the medium.
3. Autoclave at 121°C, 15 lbs pressure, for 15 minutes. Mix well before dispensing.
4. In specific work, when pH 3.5 is required, acidify the medium with sterile 10% tartaric acid.
5. The amount of acid required for 100 ml. of sterile, cooled medium is approximately 1ml.
6. Do not heat the medium after addition of the acid.

Quality Control Specifications

Dehydrated Appearance	Off-white to yellow, homogeneous, free flowing powder
Solution	2.4% Solution in Distilled or deionized water is soluble on boiling, very pale yellow colored, and clear.
Prepared Medium	Pale Yellow colored clear to slightly hazy solution.
Reaction of 2.4% Solution	pH 5.1 ± 0.2 at 25°C
Gel Strength	Not Applicable





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Expected Cultural Response: Cultural response in Potato Dextrose Broth at 25-35°C after 2 - 7 days of incubation.

Sr. No.	Organisms	Results to be achieved		
		Inoculum (CFU)	Growth	Ascospore formation
1.	<i>Candida albicans</i> ATCC 10231	50-100	luxuriant	Negative
2.	* <i>Aspergillus brasiliensis</i> ATCC 16404	50-100	luxuriant	Negative
3.	<i>Saccharomyces cerevisiae</i> ATCC 9763	50-100	luxuriant	Positive

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer to appropriate references for a complete discussion on the isolation and identification of yeast and molds.

Results

Growth is indicated by turbidity.

Storage

Store the sealed bottle containing the dehydrated medium at 10 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

Due to varying nutritional requirements, some strains may be encountered that grow poorly or fail to grow on this medium.

Packaging

Product Name : Potato Dextrose Broth

Product Code : DM216

Available Pack sizes : 100gm / 500gm

References

1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed.,
4. 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.,
5. APHA Inc., Washington, D.C.
6. MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore

Further Information

For further information please contact your local MICROMASTER Representative.





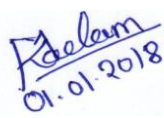


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