



Dextrose peptone AGAR

Dextrose Peptone Agar is used for the general cultivation of organisms.

REF: BS.1/GP01.100.0100	100 Gram	REF: BS.1/GP01.250.0250	250 Gram
REF: BS.1/GP01.500.0500	500 Gram		



CLINICAL SIGNIFICANCE

Dextrose Peptone Agar is formulated as suggested by Williams (1) for the cultivation of microorganisms, which are fastidious, or present in small numbers, and also for the enumeration of the thermophilic bacteria responsible for flat sour spoilage of canned foods. This medium is recommended by AOAC for the routine cultivation purpose (2).

METHOD PRINCIPLE

Peptic digest of animal tissue supplies amino acids, peptides etc. for the growth of the organisms. Dextrose is the readily available energy source for the most of the organisms. The agar medium is also used as an excellent basal agar for the Glucose Blood Agar preparation. In the special Petri plates, it can support good growth of the anaerobic microorganisms.

MEDIA COMPOSITION

Item	Formula per liter of medium
Peptone	20.00 gm
Dextrose	10.00 gm
Sodium chloride	5.000 gm
Agar	15.00 gm

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.
S56: dispose of this material and its container at hazardous or special waste collection point.
S57: use appropriate container to avoid environmental contamination.
S61: avoid release in environment.

For further information, refer to the Dextrose peptone Agar material safety data sheet.

STORAGE AND STABILITY

BioScien Dextrose peptone Agar should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Final pH 7.2 ± 0.2 at 25°C

PREPARATION

- Suspend 50 grams in 1000 ml distilled water.
- Adjust pH to 7.2 ± 0.2 at 25°C
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

Deterioration

The color of **BioScien** Dextrose peptone agar is Cream to light yellow homogeneous free flowing powder. Prepared Media is Light yellow coloured, clear to slightly opalescent gel forms in Petri plates. If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

SPECIMEN

Food samples; Water and sewage samples

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile tubes
- Incubator
- Autoclave

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact BioScien technical support.

Performance Characteristics

Fits your perfection

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 48 hours.

Microorganisms	Growth
<i>Escherichia coli</i> ATCC 25922	luxuriant
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant
<i>Staphylococcus aureus</i> ATCC 25923	luxuriant
<i>Streptococcus pyogenes</i> ATCC 19615	luxuriant

REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Association of Official Analytical Chemists, 1978, Bacteriological Analytical Manual, 5th ed., AOAC, Washington, D.C.
3. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed American Public Health Association, Washington, D.C.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
8. Williams O.B., 1936, Food Res., 1(3):217.

SYMBOLS IN PRODUCT LABELLING	
 For in-vitro diagnostic use	 Number of <n> test in the pack
 Batch Code/Lot number	 Caution
 Catalogue Number	 Do not use if package is damaged
 Temperature Limitation	 Consult Instruction for use
 Expiration Date	
 Manufactured by	



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