Nutrient Agar

Intended Use
Nutrient Agar is used as general-purpose culture media for the cultivation of bacteria, which may also be used as enrichment media by incorporating 10% v/v sterile blood or other biological fluids.

Summary
Nutrient Agar is a basic culture medium used to subculture organisms for maintenance purpose or to check the purity of subcultures from isolated plates prior to biochemical or serological testing. It is used for the cultivation and enumeration of organisms in water, sewage, faeces and other materials, which are not particularly fastidious.
Nutrient Agar is suitable for teaching purpose and maintenance of cultures, where a prolonged survival of organisms at an ambient temperature is required without risk of the overgrowth that can occur with a more nutritious medium. Nutrient Agar can be used for the cultivation of more exacting bacteria by incorporating biological fluids like horse or sheep blood, serum, ascitic fluid, egg yolk, etc. Nutrient Agar is included in the Bacteriological Analytical Manual for food testing.

Principle
Peptone, yeast extract and cara beef extract provide water soluble substances including carbohydrates, vitamins, organic nitrogen compounds and salts. Peptone is the principle source of organic nitrogen, particularly amino acids and long chained peptides. Sodium chloride maintains the osmotic equilibrium of the medium.

Formula*

Ingredients	**g/L**
Peptone	5.0
Sodium Chloride	5.0
Cara Beef Extract#	1.5
Yeast Extract	1.5
Agar	15.0
Final pH (at 25°C)	7.4 ± 0.2

*Adjusted to suit performance parameters.
Equivalent to Beef Extract.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Water and Waste Water samples; Clinical samples - Faeces; Food and Dairy samples

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 28.00 g of powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Cream to yellow coloured, clear to slightly opalescent gel forms in petridishes.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for 18 to 48 hours.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 30°C-35°C for 18 hours.

Organism (ATCC)	Growth
Escherichia coli (8739)	Good
Staphylococcus aureus subsp. *aureus* (6538)	Good
Enterococcus faecalis (29212)	Good
Pseudomonas aeruginosa (9027)	Good
Bacillus spizizenii (6633)	Good

Note: For good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Interpretation of Results

1. Examine plates for growth.
2. Growth from tubes inoculated with pure cultures can be used for biochemical and serological testing.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Warranty

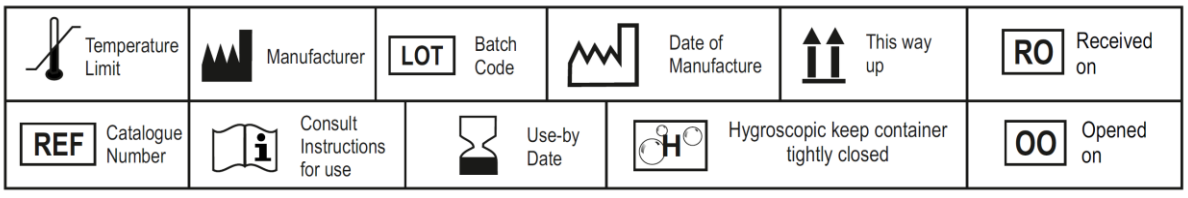
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. US Food and Drug Adm; 1998, Bacteriological Analytical Manual, 8th Ed; Rev. A, AOAC, International, Gaithersburg, Md.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201140030100	Dehydrated Culture Media	100 g
201140030500	Dehydrated Culture Media	500 g
201140032500	Dehydrated Culture Media	2.5 k
203140140250	Bottle Media	6 x 250 mL
203140140100	Bottle Media	100 mL
205140190100	Ready Prepared Plate (90 mm)	100 Plates
205140190020	Ready Prepared Plate (90 mm)	20 Plates
203140150012	Ready Prepared Slant	12 Slants



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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.