Standard Nutrient Agar

Intended Use
Standard Nutrient Agar is a general-purpose medium used for cultivation and enumeration of not particularly fastidious organisms.

Summary
Nutrient media are basic culture media used for culturing, maintaining microorganisms, and to check culture purity prior to biochemical or serological testing. Standard Nutrient Agar is used for the isolation and enumeration of bacteria. Standard Nutrient Agar can be used as a culture media base, when supplemented with blood, ascetic fluids, serum or egg yolk etc. which makes it suitable for the cultivation of relatively fastidious organisms. The media can be used for cultivation of Streptococci, Pneumococci and *Erysipelothrix* species.

Principle
Peptic digest of lean meat provides the amino acids and large chain peptides. Beef extract provides water soluble substances like carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride maintains osmotic equilibrium.

Formula*
Ingredients	**g/L**
Beef Extract	10.0
Peptic Digest of Lean Meat from	500.0
Sodium Chloride	5.0
Agar	20.0
Final pH (at 25°C)	7.6 ± 0.2

*Adjusted to suit performance parameters.

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.

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 45.00 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Mix well before pouring in sterile petridishes.

Quality Control
Dehydrated Appearance: Yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Yellow to light amber coloured, slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

Organism (ATCC)	**Growth**
Staphylococcus aureus subsp. *aureus* (25923)	Good
Escherichia coli (25922)	Good
Streptococcus pneumoniae (6303)	Good
Streptococcus pyogenes Strain Bruno (19615)	Good
Listeria monocytogenes (19111)	Good
Shigella flexneri serotype 2b (12022)	Good

Performance and Evaluation

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

1. Directions
2. Storage
3. Expiry

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. Lapage S., Shelton J. and Mitchell J., 1970, Methods in Microbiology, Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201190310500	Dehydrated Culture Media	500 g