

Nutrient Broth with 1% Peptone

Intended Use

Nutrient Broth with 1% Peptone is a general-purpose medium used for the examination of water and dairy products.

Summary

Nutrient Broth with 1% Peptone is a basic non-selective medium used for the routine cultivation of microorganisms. Nutrient Broth with 1% Peptone can be enriched by the addition of 10% v/v sterile blood or other biological fluids for the cultivation of more fastidious organisms. It is used for the examination of water, wastewater and dairy products.

Principle

Peptic digest of animal tissue and beef extract provide water-soluble substances including carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride maintains the osmotic balance.

Formula*

Ingredients	g/L
Peptic Digest of Animal Tissue	10.0
Beef Extract	10.0
Sodium Chloride	5.0
Final pH (at 25°C)	7.4 ± 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.

Type of specimen

Food and Dairy samples; Water 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 25.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Light yellow coloured, clear solution without any precipitate.

Cultural Response: Cultural characteristics is observed after an incubation at 30°C-35°C for 18-24 hours.

Organism (ATCC)	Growth
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Good
<i>Escherichia coli</i> (25922)	Good
<i>Klebsiella aerogenes</i> (13048)	Good
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good
<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> (10031)	Good

Note: Inoculum for good growth is 10-100 cfu.

Interpretation of Results

1. Growth is seen as turbidity in the medium.
2. Aliquots of the medium can be used for sub-culturing onto a solid media for isolation and identification of pure cultures.

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. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201140120100	Dehydrated Culture Media	100 g
201140120500	Dehydrated Culture Media	500 g

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.