Instructions For Use
ENGLISH

Nutrient Broth

Medium for cultivation of a broad range of bacteria.

INTENDED PURPOSE

Nutrient Broth is a liquid culture medium used for the cultivation of a wide variety of organisms from different samples.

DESCRIPTION

Nutrient Broth can be used as a pre-enrichment medium in procedures for examination of various foods, water and wastewater. Its composition permits growth of microorganisms not requiring specific nutritional requirements.

TYPICAL FORMULA* (g/l)

Beef Extract	1.0
Peptone	5.0
Yeast Extract	2.0
Sodium Chloride	5.0
Final pH 6.8 ± 0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance specifications.
Grams per liter of purified water

METHOD PRINCIPLE

Beef extract and peptone provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Sodium chloride maintains the osmotic balance of the medium.

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as: inoculating loops, sterile cotton swabs, physiological solution, incubator, quality control organisms.

TEST PROCEDURE

Inoculate the sample or material to be tested into the medium.
Incubate at 35 ± 2°C for 18-24 hours or longer if necessary.

INTERPRETING RESULTS

The presence of turbidity indicates microbial growth.

STORAGE

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

2 years.

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QUALITY CONTROL

Appearance of medium: Clear to very slight opalescent, light amber.

Expected Cultural Response:

Control strains	Incubation	Incubation	Specification
Staphylococcus aureus ATCC® 25923	≤ 100 CFU	18-24 h / 35 ± 2 °C	Good growth
Escherichia coli ATCC® 25922			
Streptococcus pyogenes ATCC® 19615			
Enteroccus faecalis ATCC® 19433			

Please refer to the actual batch related Certificate of Analysis (CoA).

PERFORMANCE CHARACTERISTICS

Performance testing of Nutrient Broth was carried out using the QC strains listed above. The results obtained met the established criteria.

LIMITATIONS

Invalid results can be caused by poor sample quality, improper sample collection, improper transportation, improper laboratory processing, or a limitation of the testing technology. The operator should understand the principles of the procedures, including its performance limitations, in advance of operation to avoid potential mistakes.

Growth depends on the requirements of each individual microorganism. It is therefore possible that certain strains which have specific requirements (substrate, temperature, incubation conditions, etc.) may not develop.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

ORDER INFORMATION

Product	Format	Packaging	Ref.
Nutrient Broth	16x100mm Plastic Tube with screw cap and self-standing base	100 x 10 ml	26103P

Revision History

Revision	Release Date	Change Summary
0	2024-10-22	Document creation

This IFU document and the SDS are available from the online Support Center:

liofilchem.com/ifu-sds

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References

1. Association of Official Analytical Chemists (1995) Official methods of analysis of AOAC International, 16th ed.
2. Marshall, R.T. (ed.) (1993) Standard methods for the microbiological examination of dairy products, 16th ed.
3. American Public Health Association (1923) Standard methods of water analysis, 5th ed.

Table of Symbols

LOT	Batch code
REF	Catalogue number
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult instructions for use
	Do not reuse
	Keep away from sunlight

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Liofilchem® s.r.l.

Via Scozia, 64026 Roseto degli Abruzzi (TE) Italy
Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.com liofilchem@liofilchem.com