

# Standard Nutrient Agar I

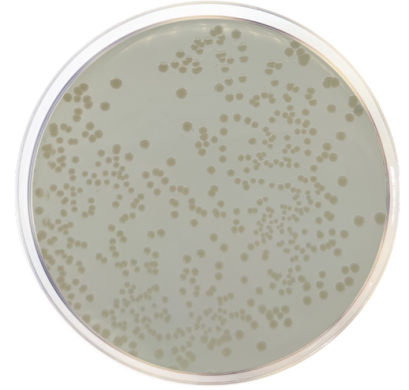
Cat. 1177

For the cultivation and enumeration of fastidious bacteria.

## Practical information

Applications	Categories
Non selective enumeration	Fastidious microorganisms

Industry: General cultivation



## Principles and uses

Standard Nutrient Agar I is a medium suitable for the cultivation and enumeration of fastidious bacteria. The addition of blood, ascites fluid or serum makes it also suitable to cultivate streptococci, pneumococci and other microorganisms. It is employed for the enumeration and isolation of bacteria, and also as high-grade base for preparing special culture media.

The peptones present in the formula provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Dextrose is the fermentable carbohydrate providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent.

## Formula in g/L

Bacteriological agar	12	Dextrose	1
Peptone	15	Sodium chloride	6
Yeast extract	3		

Typical formula g/L \* Adjusted and/or supplemented as required to meet performance criteria.

## Preparation

Suspend 37 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes.

## Instructions for use

- Incubate the Petri dishes aerobically at 35± 2°C during 18-24 hours.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	7,5 ± 0,2

## Microbiological test

Incubation conditions: (35±2 °C / 18-24 h)

Microorganisms	Specification
<i>Shigella flexneri</i> ATCC 12022	Good growth
<i>Listeria monocytogenes</i> 4b ATCC 13932	Good growth
<i>Streptococcus pyogenes</i> ATCC 19615	Good growth
<i>Escherichia coli</i> ATCC 25922	Good growth
<i>Staphylococcus aureus</i> ATCC 25923	Good growth

## Storage

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Temp. Min.:2 °C  
Temp. Max.:25 °C

## Bibliography

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American Public Health Association 1917. Standard methods of water analysis, 3rd Ed. American Public Health Association, Washing D.C  
American Public Health Association 1923. Standard methods of water analysis, 5th Ed. American Public Health Association, Washing D.C  
Eaton, A.D., L. S Clesceri, and A. E. GreenBurg (Ed). 1995. Standard methods for the examination of water and wastewater, 19th ed. American Public Health Association, D. C  
Vanderzant C., and D. F. Splittsoeesser (Ed). 1992. Compendium of methods for the microbiological examination of foods, 3rd ed. American Public Health Association. D. C.