

# Yeast Nitrogen Base w/o Added Aminoacids and w/o Ammonium Sulfate

Cat. 1553

For yeast classification based on carbon and nitrogen requirements.

## Practical information

Applications	Categories
Differentiation	Yeasts

Industry: Molecular biology / Microbiological Culture Media

## Principles and uses

Yeast Nitrogen Base w/o Added Aminoacids and w/o Ammonium Sulfate is used for classifying yeasts based on carbon and nitrogen requirements and is prepared according to the formulas of Wickerharm and Burkholder. The medium contains all the essential vitamins and inorganic salts needed to cultivate yeasts, except for the aminoacids and carbohydrate sources.

This medium is used in many applications for the study of yeast in molecular biology as is useful for the determination of aminoacids and carbohydrate utilization.

## Formula in g/L

Biotin	0,000002	Boric acid	0,0005
Calcium chloride	0,1	Calcium pantothenate	0,0004
Ferric chloride	0,0002	Folic Acid	0,000002
Inositol	0,002	Magnesium sulfate	0,5
Manganese sulfate	0,0004	Monopotassium phosphate	1
Niacin	0,0004	P-Aminobenzoic acid	0,0002
Potassium iodide	0,0001	Riboflavin	0,0002
Sodium chloride	0,1	Sodium molybdate	0,0002
Thiamine hydrochloride	0,0004	Zinc sulfate	0,0004
Cupric Sulphate	0,00004		

## Preparation

Prepare a 10X solution by dissolving 1,7 grams of the medium in 100 ml of distilled water with 5 grams of dextrose, or the equivalent amount of another carbohydrate, and 5-10 mg of the desired amino acid. Mix well. Heat with frequent agitation until complete dissolution. DO NOT BOIL. DO NOT AUTOCLAVE. Sterilize the solution by filtration. Prepare the final medium by aseptically pipetting 0,5 ml of the 10X solution to 4,5 ml of distilled water. Swirl to mix solution before inoculation.

## Instructions for use

Inoculate and incubate at a temperature of 25-30 °C for 2-5 days.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Off-white	Amber	4,5±0,2

## Microbiological test

Incubation conditions: (25-30 °C / 2-5 days).

Microorganisms	Specification
<i>Candida albicans</i> ATCC 10231	Good growth
<i>Sacharomyces cerevisiae</i> ATCC 9080	Good growth
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good growth
<i>Kloeckera apiculata</i> ATCC 9774	Good growth

## Storage

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Temp. Min.:2 °C  
Temp. Max.:25 °C

## Bibliography

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Shadomy, S., and Espinel Ingroff, A.1980. Susceptibility Testing with Antifungal Drugs, p. 647-653. In E. H. Lennete, A. Balos, W. J. Hausler, Jr., and J.P. Truant, Manual of Clinical Microbiology, 3rd Ed., American Society for Microbiology, Washington, D.C. U.S. Dept. Agric. Tech.Bull.No.1029,1 951.