

Yeast Nitrogen Broth



Medium used for the classification and cultivation of yeasts based on carbon assimilation.

• CONTENTS (Liter)

Nitrogen source

Ammonium Sulfate 5.0 g

Amino Acids

L-Histidine Monohydrochloride 0.01 g

LD-Methionine 0.02 g

LD-Tryptophan 0.02 g

Vitamins

Biotin 2.0 µg

Calcium Pantothenate 400.0 µg

Folic Acid 2.0 µg

Inositol 2000.0 µg

Niacin 400.0 µg

p-Aminobenzoic Acid 200.0 µg

Pyridoxine Hydrochloride 400.0 µg

Riboflavin 200.0 µg

Thiamine Hydrochloride 400.0 µg

Compounds Supplying Trace Elements

Boric Acid 500.0 µg

Copper Sulfate 40.0 µg

Potassium Iodide 100.0 µg

Ferric Chloride 200.0 µg

Manganese Sulfate 400.0 µg

Sodium Molybdate 200.0 µg

Zinc Sulfate 400.0 µg

Salts

Monopotassium Phosphate 1.0 g

Magnesium Sulfate 0.5 g

Sodium Chloride 0.1 g

Calcium Chloride 0.1 g

Final pH = 5.4 ± 0.2 at 25°C.

• PROCEDURE

Medium should be prepared in 10X strength. Suspend 6.76 G of powder in 100mL of distilled water or deionized water. Add 5 G of dextrose or equivalent amount of other carbohydrate. Mix well and sterilize the medium by filtration. DO NOT HEATING. Prepare the final medium by aseptically pipetting 1 mL of the solution into 9 mL of distilled or deionized water in tubes. Mix well. Keep refrigerated until used.

• INTERPRETATION

Yeast Nitrogen Broth is a medium used for the classification and cultivation of yeasts based on carbon assimilation. The medium contains all essential nutrients and vitamins necessary for growth of yeasts. Growth around the carbohydrate indicates that the sugar is assimilated as a carbon source by the yeast.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 25 ± 2°C for 2 - 7 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: white.

Prepared medium

Appearance: clear.

Color: colorless.

Incubation conditions: 25 ± 2°C / 2 - 7 days

Microorganism	ATCC	Inoculum CFU	Growth
<i>Saccharomyces cerevisiae</i>	76625	50-100	good
<i>Candida albicans</i>	10231	50-100	good
<i>Candida krusei</i>	32196	50-100	good
<i>Candida tropicalis</i>	750	50-100	good

• STORE

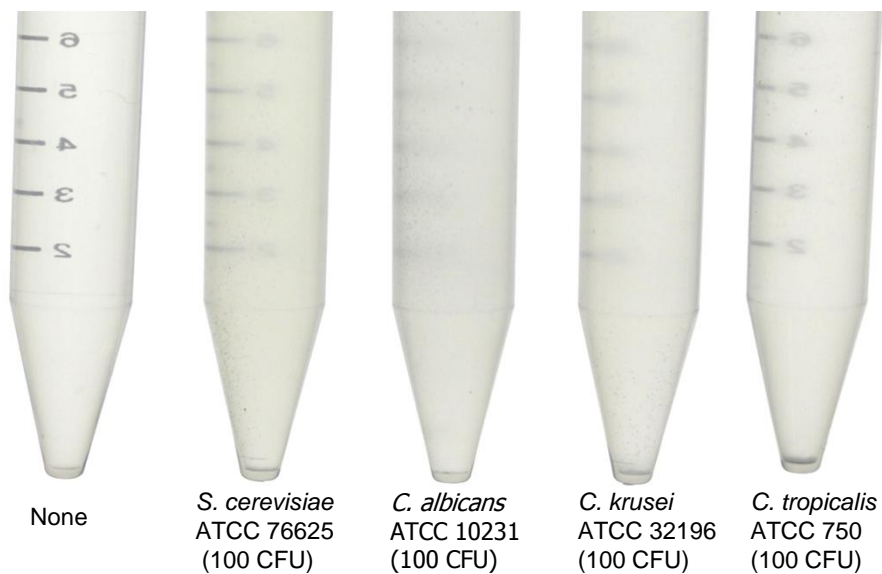
The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Beijerinck. 1889. Arch. Neerl. Sci. Exactes Nat. 23:367.
2. Haley, Trande land Coyle. 1980. Cumitech 11, Practical method for culture and identification of fungi in the clinical mycology laboratory. Coord. ed., Sherris. American Society for Microbiology, Washington, D.C.
3. Sherman, Fink and Hicks. 1986. Methods in yeast genetics. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.
4. Wickerham. 1948. J. Bacteriol. 56:363.
5. Wickerham. 1951. Taxonomy of yeasts. Technical bulletin No. 1029, U.S.Dept Agriculture, Washington, D.C.
6. Wickerham and Burton. 1958. J. Bacteriol. 56:363.

• PACKAGE

Cat. No : MB-Y0614 Yeast Nitrogen Broth	500 G
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• MICROBIAL CULTURE IMAGES

Incubation conditions : $25 \pm 2^{\circ}\text{C}$ 2 -7 days