

Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate)



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

• CONTENTS (Liter)

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 = 4.5 ± 0.2 at 25°C

• PROCEDURE

Medium should be prepared in 10X strength. Suspend 1.7 G of powder in 100mL of distilled water or deionized water. If necessary, add 5 G of dextrose or equivalent amount of another carbohydrate, ammonium sulfate and desired amino acid. 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 (without Amino Acids and Ammonium Sulfate) is a medium used for the isolation and cultivation of yeasts based on carbon and nitrogen assimilation. The medium contains all essential nutrients and vitamins necessary for growth of yeasts except amino acids, nitrogen and carbohydrate.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 25 - 30°C for 6 - 7 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light yellowish-beige

Prepared medium

Appearance : clear

Color: colorless

Incubation conditions: 25 - 30°C / 6 - 7 days

Microorganism	ATCC	Inoculum CFU	Growth w/o addition	Growth w/ addition
<i>Saccharomyces cerevisiae</i>	76625	50-100	none to poor	good
<i>Candida albicans</i>	10231	50-100	none to poor	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. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Warren and Hazen. 1995. In Murray, Baron, Pfaller, Tenover and Tenover (ed.). Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
2. Wickerham. 1951. Taxonomy of yeasts. Technical bulletin No. 1029, U.S.Dept Agriculture, Washington, D.C.
3. Wickerham. 1939. J. Tropical Med. Hyg. 42:176.
4. Wickerham. 1946. J. Bacteriol. 52:293.
5. Wickerham. 1948. J. Bacteriol. 56:363.
6. Wickerham. 1943. J. Bacteriol. 46:501.
7. Wickerham and Burton. 1958. J. Bacteriol. 56:363.
8. Beijerinck. 1889. Arch. Neerl. Sci. Exactes Nat. 23:367.
9. Warren and Shadomy. 1991. In Balows, Hausler, Herrmann, Isenberg and Shadomy (ed.). Manual of clinical microbiology, 5th ed. American Society for Microbiology, Washington, D.C.
10. Guenter. Personal Communication.
11. Sherman, Fink and Hicks. 1986. Methods in yeast genetics. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.
12. Brownstein, Silverman, Little, Burke, Korsmeyer, Schlessinger and Olson. 1989. Isolation of singlecopy human genes from a library of yeast artificial chromosomes clones. Science. 244:1348.
13. 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.
14. Larone. 1995. Medically important fungi: a guide to identification, 3rd ed. American Society for Microbiology, Washington, D.C.

• PACKAGE

Cat. No : MB-Y0796 Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate)	500 G
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