

Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate**G091**

Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate is used for the growth of all strains of *Saccharomyces cerevisiae*.

Composition :**

Ingredients	Milligrams/Litre
Potassium phosphate, monobasic	1000.00
Magnesium sulphate	500.00
Sodium chloride	100.00
Calcium chloride	100.00
D-Biotin	0.002
Calcium pantothenate	0.40
Folic acid	0.002
Inositol	2.00
Niacin	0.40
PABA	0.20
Pyridoxin, HCl	0.40
Riboflavin	0.20
Thiamine HCl	0.40
Boric acid	0.50
Copper sulphate	0.04
Potassium iodide	0.10
Ferric chloride	0.20
Manganese sulphate	0.40
Sodium molybdate	0.20
Zinc sulphate	0.40
Ammonium sulphate	5000.00

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 6.7 grams in 1000 ml distilled water. (For best results the medium should be prepared in 10X strength, i.e. 6.7 grams in 100 ml). Add 5 grams of Dextrose or an equivalent amount of any other carbohydrate. Sterilize by autoclaving at 115°C for 20 minutes. Mix well and dispense as desired.

Principle and Interpretation : Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate is used for the growth of all strains of *Saccharomyces cerevisiae*. This medium has been formulated after following the procedures of Wickerham and Burkholder (1, 2, 3). This is a well defined medium consisting of salts, vitamins and ammonium sulphate (nitrogen source). Addition of a carbon source is required for the growth of *Sacharomyces*

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cerevisiae. YNB w/ Ammonium Sulphate is formulated for investigation of yeast for their differential abilities in carbon assimilation in the presence of a carbon source like glucose, galactose or raffinose.

References:

1. Wickerham L. J., 1951, U.S. Dept. Agric. Tech. Bull. No. 1029
2. Wickerham L. J., 1946, J. Bacteriol., 52:293
3. Burkholder, P. R. 1943. Vitamin deficiencies in yeasts. Amer. J. Bot. 30:206-211

Quality Control :**Appearance of Powder :**

Cream to yellow coloured, homogeneous, free flowing powder.

Colour and Clarity of prepared medium:

Light yellow coloured, clear solution without any precipitate.

Cultural Response :

Cultural characteristics observed after an incubation at 25-30°C for 18 - 48 hours.

Organisms (ATCC)

Saccharomyces cerevisiae

Growth (plain)

Poor-good

Growth (with Dextrose)

good-luxuriant

Storage and Shelf-life :

Store below 30°C and the prepared medium at 2 - 8°C. Use before expiry date on the label.