

Molecular Biology Growth Media

# **Technical Information**

## Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate, w/o Phosphates, w/o Sodium Chloride

## Product Code: G1094

Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate, w/o Phosphates, w/o Sodium Chloride is used for the growth of all strains of Saccharomyces cerevisiae.

Composition**		
Ingredients	Grams/Litre	
Magnesium sulphate	500.00	
Calcium chloride	100.00	
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

## Methodology

Suspend 5.6 grams in 1000 ml distilled water. Sterilize by autoclaving at 10 lbs pressure (115°C) for 20 minutes. Mix well and dispense as desired.

## Principle and Interpretation

Yeast Nitrogen Base (YNB) w/ Ammonium Sulphate, w/o Phosphates, w/o Sodium Chloride is used for the growth of all strains of Saccharomyces cerevisiae. This yeast strain is called budding yeast and is extensively studied microorganism in molecular and cell biology. Yeast Nitrogen Base (YNB) w/ Ammonium Sulfate w/o Phosphates, w/o Sodium Chloride is developed according to the formulae of Wickerham (1) and Burkholder (2) which supplies the required nutritional elements for budding yeast cells. This media is used for the classification of yeast strains based on the carbon and nitrogen requirements and it contains all the essential vitamins and inorganic salts except Potassium phosphate and Sodium chloride which are required for the propagation of yeast cells. Furthermore, this media does not contain the amino acids namely, histidine, methionine, leucine, lysine and tryptophan.



#### Molecular Biology Growth Media

## Quality control

#### Appearance of Powder :

White to cream coloured, homogeneous, free flowing powder.

Colour and Clarity :

Colourless, clear solution without any precipitate.

Cultural Response :

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

Organisms (ATCC)	Growth
Saccharomyces cerevisiae ATCC 9763	good-luxuriant

## Storage and Shelf Life

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

### References

1. Wickerham, L. J. 1951. Taxonomy of yeasts. Technical bulletin No. 1029, US. Dept. Agriculture.

2. Burkholder, P. R. 1943. Vitamin deficiencies in yeasts. Amer. J. Bot. 30:206-211.

#### **Disclaimer**:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.