### **Yeast Nitrogen Base**

#### **Intended Use**

Yeast Nitrogen Base is recommended for classification of Yeasts on the basis of their ability to assimilate carbon compounds.

## **Summary and Principle**

Yeast Nitrogen Base is formulated as per Wickerham for investigations of yeasts for their different abilities in carbon assimilation. With added carbon source it may also be used for susceptibility testing with antifungal drugs when defined liquid medium is needed.

Inoculate media tubes with very light inoculum and incubate at 25°C for 6-7 days and again for 20-24 days. Draw lines with India ink on a paper and hold the paper against the Yeast Nitrogen Base tubes. If lines are not seen or appear diffused through the culture, the test is considered positive and if lines are distinguishable, test is negative.

#### Formula\*

Torrida	
Ingredients	g/L
Ammonium Sulphate	5.0
L-Histidine Hydrochloride	0.01
DL-Methionine	0.02
DL-Tryptophan	0.02
Biotin	0.000002
Calcium Pantothenate	0.0004
Folic Acid	0.000002
Inositol	0.002
Niacin	0.0004
p-Amino Benzoic acid (PABA)	0.0002
Pyridoxine Hydrochloride	0.0004
Riboflavin (Vitamin B2)	0.0002
Thiamine Hydrochloride	0.0004
Boric Acid	0.0005
Copper Sulphate	0.00004
Potassium Iodide	0.0001
Ferric Chloride	0.0002
Manganese Sulphate	0.0004
Sodium Molybdate	0.0002
Zinc Sulphate	0.0004
Monopotassium Phosphate	1.0
Magnesium Sulphate	0.5
Sodium Chloride	0.1
Calcium Chloride	0.1
Final pH (at 25°C)	$5.4 \pm 0.2$
*Adjusted to suit performance parameters	

<sup>\*</sup>Adjusted to suit performance parameters.

# **Storage and Stability**

Store below 8°C in tightly closed container, preferably in dessicators and use freshly prepared medium. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

### Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

#### **Directions**

- 1. For best results, the medium should be prepared in 10X strength.
- 2. Suspend 6.75 g of the powder in 100 mL purified / distilled water.
- 3. Add 5.00 g of dextrose or an equivalent amount of other carbohydrate.
- 4. Warm if necessary, to dissolve the powder completely.
- 5. Sterilize by filtration.
- 6. Keep refrigerated until use.
- 7. Final medium is made by pipetting 0.5 mL into 4.5 mL of sterile purified / distilled water.

### **Quality Contro**

**Dehydrated Appearance:** Cream to yellow coloured, homogeneous, free flowing powder.

**Prepared Appearance:** Colourless (at 10X concentration colour of medium is pale yellow) clear solution without any precipitate.

**Cultural Response:** Cultural characteristics observed after an incubation at 25°C-30°C for 6-7 days (longer if necessary for unto 24 days).

Organism (ATCC)	Growth
Kloeckera apiculata (9774)	Good
Saccharomyces cerevisiae NRRL Y-567 (9763)	Good
Saccharomyces uvarum (28098)	Good

#### **Performance and Evaluation**

Performance of the product is dependent on following parameters as per product label claim:

- 1. Directions
- 2. Storage
- 3. Expiry

### Warrantv

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

#### Reference

- 1. Wickerham, 1951, U.S. Dept. Agri. Tech. Bull No. 1029.
- 2. Lennette E. H., Balows, Hausler and Truant, (Eds.), 1980, Manual of Clinical Microbiology, 3<sup>rd</sup> Ed., ASM, Washington D.C.
- 3. Padhye A. A., 1981, Diagnostic Procedures for Bacterial, Mycotic and Parasitic Infections, 6<sup>th</sup> Ed., APHA, Washington, D.C.
- 4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

### **Product Presentation:**

Cat. No.	Product Description	Pack Size
201250120100	Dehydrated Culture Media	100 g
201250120500	Dehydrated Culture Media	500 g

## Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.