

TM 1119 - YEAST NITROGEN BASE

INTENDED USE

For classification of yeasts on the basis of their ability to assimilate carbon compounds.

PRODUCT SUMMARY AND EXPLANATION

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.

COMPOSITION

Ingredients	Gms / Ltr
Ammonium sulphate	5.000
L-Histidine hydrochloride	0.010
DL-Methionine	0.020
DL-Tryptophan	0.020
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
Potassium dihydrogen phosphate	1.000
Magnesium sulphate	0.500
Sodium chloride	0.100
Calcium chloride anhydrous	0.100

PRINCIPLE

Histidine, methionine, and tryptophan provide necessary amino acids. Ammonium sulfate supplies a source of nitrogen. The medium also contains required vitamins, trace elements, and salts.

INSTRUCTION FOR USE

For best results, the medium should be prepared in 10X strength.

- Dissolve 6.75 grams in 100 ml purified / distilled water.
- Add 5 grams of dextrose or an equivalent amount of other carbohydrate.
- Warm if necessary to dissolve the medium completely.
- Sterilize by filtration. Keep refrigerated until use.
- Final medium is made by pipetting 0.5 ml into 4.5 ml of sterile purified / distilled water.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Colourless (at 10X concentration colour of medium is pale yellow) clear solution without any precipitate.
pH (at 25°C)	: 5.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Growth w/ dextrose	Incubation Temperature	Incubation Period	Incubation Period (if necessary)
<i>Kloeckera apiculata</i>	9774	10-100	None-poor	Good	25-30°C	6-7 days	upto 24 days
<i>Saccharomyces cerevisiae</i>	9763	10-100	None-poor	Good	25-30°C	6-7 days	upto 24 days
<i>Saccharomyces uvarum</i>	28098	10-100	None-poor	Good	25-30°C	6-7 days	upto 24 days

PACKAGING:

In pack size of 100 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

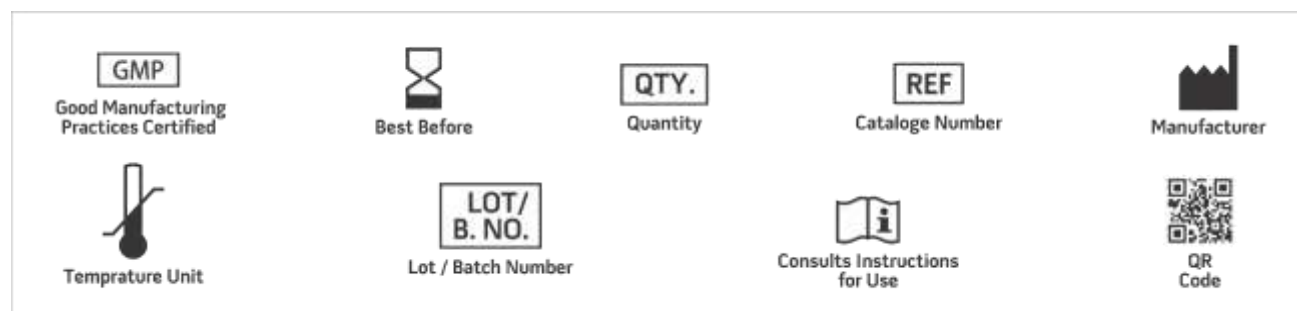
DISPOSAL



After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook Second Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual Clinical Microbiology, 11th Edition. Vol. 1.
3. Lennette E. H., Balows, Hausler and Truant, (Eds.), 1980, Manual of Clinical Microbiology, 3rd Ed., ASM, Washington D.C.
4. Padhye A. A., 1981, Diagnostic Procedures for Bacterial, Mycotic and Parasitic Infections, 6th Ed., APHA, Washington, D.C.
5. Wickerham, 1951, U.S. Dept. Agri. Tech. Bull No. 1029.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019