

TM 499 - YEAST NITROGEN BASE (W/O AMINO ACIDS)

INTENDED USE

For investigating carbon and nitrogen requirements of yeasts.

PRODUCT SUMMARY AND EXPLANATION

Yeast Nitrogen Base without Amino Acids is formulated as per Wickerham and is used for investigating amino acid and carbohydrate requirement of yeasts.

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. If lines are not seen or appear diffused through the culture, the test is considered positive and if the lines are distinguishable, test is considered negative.

COMPOSITION

Ingredients	Gms / Ltr		
Ammonium sulphate	5.000		
Monopotassium phosphate	1.000		
Magnesium sulphate	0.500		
Sodium chloride	0.100		
Calcium chloride	0.100		
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		
Biotin	0.000002		
Calcium pantothenate	0.0004		
Folic acid	0.000002		
Inositol	0.002		
Niacin	0.0004		
p-Amino benzoic acid (PABA)	0.0002		
Riboflavin (Vitamin B2)	0.0002		
Pyridoxine hydrochloride	0.0004		
Thiamine hydrochloride	0.0004		

PRINCIPLE

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 is prepared in 10X strength.













- Dissolve 6.7 grams in 100 ml distilled water.
- Add 5 gm dextrose or an equivalent amount of other carbohydrate and other chemicals like amino acids that modify growth of yeasts as desired.
- Ensure complete solution and sterilize by filtration.
- For use, dilute 0.5 ml 10X medium to make 5 ml with sterile distilled water.
- Mix well.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : White to cream homogeneous free flowing powder.

Appearance of prepared medium: Colourless to light yellow coloured 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 with dextrose	Incubation Temperature	Incubation Period	Incubation Period (if necessary)
Kloeckera apiculata	9774	10-100	None- poor	Good	25-30°C	6-7 days	up to 24 days
Saccharomyces uvarum	28098	10-100	None- poor	Good	25-30°C	6-7 days	up to 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. Wickerham L. J., 1951, U.S. Dept. Agric. Tech. Bull. No. 1029.
- 2. Wickerham L. J., 1946, J. Bacteriol., 52:293.















NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







