

TM 2419 - VITAMIN FREE YEAST BASE

INTENDED USE

For studying vitamin requirements of yeasts.

PRODUCT SUMMARY AND EXPLANATION

Yeasts are unicellular, eukaryotic, budding cells that are generally round, oval or elongated in shape and are considered as opportunistic pathogens. They multiply principally by the production of blastoconidia (buds). Yeast colonies are moist and creamy or glabrous to membranous in texture. Moulds are microscopic, plant-like organisms, composed of long filaments called hyphae. Both are widely distributed in soil, water and air. Cultivation of yeasts and moulds becomes important in fermentation studies where they are generally used as starter cultures. Vitamin Free Yeast Base is recommended for classification of yeasts based on vitamin requirement. It contains all essential nutrients and necessary inorganic salts for the cultivation of yeasts. Use a highly diluted inoculum and incubate the tubes for 7 days at 25-28°C, since with the inoculum, vitamins may also be transported. Yeast themselves are also able to carry traces of vitamins, and therefore a second inoculation in Vitamin Free Yeast Base must be performed following the same procedure as for the first inoculation. Then incubate at 25-28°C for 7 days.

COMPOSITION

Ingredients	Gms / Ltr
Ammonium sulphate	5.000
Dextrose	10.000
L-Histidine monohydrochloride	0.010
DL-Methionine	0.020
DL-Tryptophan	0.020
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	1.000
Magnesium sulphate	0.500
Sodium chloride	0.100
Calcium chloride	0.100

PRINCIPLE

L-Histidine monohydrochloride, DL-methionine and DL-tryptophan are the amino acid sources. Dextrose is an energy source. Sodium chloride, magnesium sulphate and ammonium sulphate are sources of ions that simulate metabolism. Monopotassium phosphate buffers the medium. The trace elements provide inorganic salts for the cultivation of yeasts.

INSTRUCTION FOR USE

- Dissolve 16.75 grams in 1000 ml distilled water containing the desired vitamins.



- If necessary, warm slightly to effect complete solution.
- This is 10X medium.
- Sterilize by filtration and store in refrigerator.
- For use dilute 0.5 ml of this with 5 ml of sterile distilled water. Shake thoroughly before inoculation.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : White to cream homogeneous free flowing powder.
Appearance of prepared medium : Colourless clear solution.
pH (at 25°C) : 5.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Growth (w/ trace elements & vitamins)	Incubation Temperature	Incubation Period
<i>Kloeckera apiculata</i>	9774	10-100	None-poor	Good-luxuriant	25-30°C	6-7 days
<i>Saccharomyces uvarum</i>	28098	10-100	None-poor	Good-luxuriant	25-30°C	6-7 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. Murray P. R., Baron E. J., Jorgensen J. H., Tenover F. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
2. Wickerham L. J., 1951, Taxonomy of yeasts, Technical bulletin No. 1029, U.S. Dept. Agriculture.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckenhof 10 48143 Aachen, Germany</small>	 European Conformity	 QR Code	 Consults instructions for Use	 Best Before

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

***For Lab Use Only**
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