

TM 1329 – APRY AGAR BASE

INTENDED USE

For detection and isolation of acid resistant yeasts, *Zygosaccharomyces bacillii* and *Zygosaccharomyces rouxii* in food products.

PRODUCT SUMMARY AND EXPLANATION

Preservation of salads, salad dressing usually depends on the vinegar (acetic acid) or lemon juice present. The microflora causing salad dressings to spoil seems quite restricted. These spoilage organisms come from the ingredients, from manufacturing equipment or from air. Yeast *Zygosaccharomyces* has a long history of spoilage in the food industry. *Zygosaccharomyces* species is described as osmophilic, suggesting a habitat restricted to high solute environments. *Zygosaccharomyces* is extraordinarily resistant to common preservatives used in juices, concentrates and wine. Addition of acetic acid and potassium sorbate allows the growth of acid resistant yeasts.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Tryptone	10.000
Yeast extract	2.500
Dextrose (Glucose)	20.000
Fructose	30.000
Sodium chloride	25.000
Agar	15.000

PRINCIPLE

The medium contains tryptone, peptone and yeast extract which provide carbonaceous and nitrogenous compounds, vitamin B complex and other growth nutrients. Glucose and fructose provide an energy source.

INSTRUCTION FOR USE

- Dissolve 107.5 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add 5 ml concentrated acetic acid and 1 ml of 10% Potassium Sorbate.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation with added 5 ml conc. acetic acid and 1 ml of 10% Potassium sorbate.



Microorganism	Strain	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Zygosaccharomyces bailii</i>	70492 DSM	50-100	Good-luxuriant	>=50%	30°C	72 Hours
<i>Zygosaccharomyces rouxii</i>	34890 ATCC	50-100	Good-luxuriant	>=50%	30°C	72 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 2nd 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 of Clinical Microbiology, 11th Edition. Vol. 1.
3. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
4. Thomas S. and Davenport R. R., 1985, Zygosaccharomyces bailii, A Profile of Characteristics and Spoilage Activities, Food Microbiology 2:157-169.

 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

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