APRY Agar Base

M1291

Intended Use:

Recommended for the detection and isolation of acid resistant yeasts, *Zygosaccharomyces bailii* and *Zygosaccharomyces rouxii* in salads, sauces and dressings.

Composition**

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

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 107.5 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs 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 (FD124). Mix well and pour into sterile Petri plates.

Principle And Interpretation

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 (3). Yeast *Zygosaccharomyces* has a long history of spoilage in the food industry (4). *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.

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. Addition of acetic acid and potassium sorbate allows the growth of acid resistant yeasts.

Type of specimen

Food samples

Specimen Collection and Handling:

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (3).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within theexpiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

Cultural Response

Cultural characteristics observed with added 5 ml conc. acetic acid and 1 ml of 10% Potassium sorbate (FD124) after an incubation at 30°C for 72 hours.

Organism	Growth
Zygosaccharomyces bailli DSM 70492	good-luxuriant
Zygosaccharomyces rouxii ATCC 34890	good-luxuriant

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

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.

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