

# **Instruction Manual**

MC-Media Pad Yeast & Mold

Convenient culture media for enumeration of yeast & mold count

# **Application**

For hygiene control, it is important to determine the microbial count in food and beverage products. MC-Media Pad Yeast & Mold is intended to enumerate viable yeast & mold using a special medium composition and unique redox indicator. MC-Media Pad pre-sterilized, ready-to-use dry culture devices simplify testing and minimize the quantity of waste.

MC-Media Pad is composed of a unique adhesive sheet, a test pad coated with medium and water absorption polymer, and a transparent cover film. MC-Media Pad Yeast & Mold is intended for enumeration of yeasts and molds in foods with an aw of >0.95.

#### **Test Principles**

MC-Media Pads are coated with a growth medium and a redox indicator for detection. Once the liquid sample is inoculated onto the test pad, the sample diffuses through the whole pad by capillary action.

The medium re-constitutes automatically. If target organisms are present, they grow as red colored colonies on the test pad.

# **AOAC Certification**

AOAC Performance Tested Method<sup>SM</sup> study (Certificate No. 111401)

MC-Media Pad Yeast & Mold was found to be an effective procedure for enumeration of yeasts and molds in chicken nuggets, dry pet food, orange juice concentrate, yogurt, and cake mix.

# **Contents and Storage**

100 pads (4x25 pads); catalogue number 1323030001 This kit should be stored between 2-15°C. (Refrigerated)

### Materials Required but not Provided

- Incubator (25±1°C)
- Stomacher or Blender
- Sampling bag (Recommended for Stomacher; bag with filter to eliminate food debris)
- Pipette or Pipettor and pipette tips
- 0,1% Petone-water or appropriate diluents according to EN ISO 6887

#### Sample Preparation

#### For solid food samples

Homogenize the test sample with 9-fold volume of appropriate diluent (e.g. 0,1% Petone-water, Butterfield's 0,1% Peptone-water, saline or water) with a stomacher. If necessary, make 10-fold serial dilution.

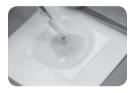
#### For liquid samples

Sample can be applied directly. If necessary, pH of sample should be adjusted to neutral (pH  $7.0 \pm 0.2$ ).

# **Test Procedure**

#### **General Operation**

- 1. Open the aluminum bag, and remove MC-Media Pad. If necessary, write information on the cover film.
- 2. Lift the transparent cover film and pipette 1.0 mL of sample solution onto test pad. (It is recommended to lift the cover film diagonally for easy and secure re-sealing.)

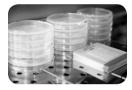




Close the cover film and lightly press the edges of film to seal.



4. Incubate test plate at 25±1 °C for 48-72 hours.



5. Re-seal the opened bags and store at 2-15°C for up to 4 weeks.



## Interpretation



Count all reddish colored colonies. Yeasts will appear as circular reddish colored colonies. Molds will appear as diffuse and fuzzy round reddish colored colonies. The specific color of mold spore may be overlapped onto reddish colored colonies.

If the large number of colonies is difficult to count, colony counts can be estimated by counting colonies in one grid square and multiplying by 20.

If more than  $10^4$  of microbes are grown, the entirety of test pad may appear as stained, and it may appear that no individual colonies were formed. If this occurs then dilute the sample further and re-test. If necessary, the target colony can be picked up with a sterile needle from the test pad for further analysis.

#### **Precautions**

- The test is designed for use by quality control personnel and others familiar with testing samples potentially contaminated with aerobic microbes
- Read this instruction manual carefully before use
- After opening the aluminum bag, unused pads should be stored in the aluminum bag sealed with tape, and kept in a cool (2-15 °C) environment.
   After opening, use all pads within 1 month
- Do not expose unused pads to sunlight or ultraviolet light
- · Do not use a discolored or damaged pad
- A wrinkle on the test pad should not affect detection
- Small fragments of fabric on or around the test pad should not affect detection
- Do not use the pads after the expiration date.
  The quality of an expired pad is not warranted
- The measurement range is less than 300 cfu/pad.
  If more than 300 cfu/pad counted, further dilution is recommended
- The nature of food (high viscosity food or food dye) may affect test usage or results. In that case, the causes need to be eliminated by dilution or other means
- The used kit must be decontaminated by autoclaving or boiling, and disposed according to local regulations for waste



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