Product code: SK05A25 (25 plates x 40), SK05B25 (25 plates x 4), SK05A10 (10 plates x 100), SK05B10 (10 plates x 10)

Creation: March 2017 (ver. 1)
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MC-Media Pad™ "YM" instruction manual

Easy and accurate dry culture system for Microbial Counts

BACKGROUND

For hygiene control, it is important to determine microbial number in foodstuffs and process environment. MC-Media Pad YM is intended to determine viable yeasts and molds number by special medium composition and 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 unique adhesive sheet, a test pad coated with medium and water absorption polymer, and a transparent cover film. MC-Media Pad YM is intended for enumeration of yeasts and molds in foods with an aw of > 0.95 and gives comparable performance to ISO 21527-1.

TEST PRINCIPLES

The MC-Media Pad YM is coated with growth medium and redox indicator for detection. Once the liquid sample is inoculated onto test pad, the sample diffuses to whole pad through capillary action. The medium re-constitutes automatically. If target organisms are present, they grow as red colored colonies on test pad.

CONTENTS and STORAGE

- ●1000 plates ···· code **SK05A25** (25 plates x 40)
  SK05A10 (10 plates x 100)
- ●100 plates ···· code **SK05B25** (25 plates x 4)
  SK05B10 (10 plates x 10)

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% Peptone water or appropriate diluents according to EN ISO 6887

SAMPLE PREPARATION

●For solid food stuffs

Homogenize the test sample (e.g. 25g or 50g) with 9-fold volume of appropriate diluent (e.g. 0.1% Peptone water, Butterfield's Phosphate Buffer, Phosphate Buffered Saline, saline or water) with a stomacher for 1-2 min. If necessary, make 10-fold serial dilution.

●For water, liquid food stuffs, swab test sample

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

TEST PROCEDURE

●General Operation

1. Open aluminum bag, and take MC-Media Pad. If necessary, write information on the cover film.
2. Lift the cover film, and drop 1mL of sample solution onto test pad.
3. Replace the cover film, and lightly press the edges of film to seal.(It is recommended to lift the cover film diagonally for easy and sure re-sealing.)
4. Incubate test plate at 25 ± 1 °C for 48-72* hours. *only 72hour incubation has been validated according to MicroVal ISO16140 validation

●Other Application

MC-Media Pad is also available for Wiping/Stamping technique, Membrane filter method, and Airborne falling bacteria test. MC-Media Pad website provides detailed information.
(https://www.jnc-corp.co.jp/MC-MP/)

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 sterile needle from test pad for further analysis.

PRECAUTIONS

1. The test is designed for use by quality control personnel and others familiar with testing samples potentially contaminated with yeast and mold.
2. Read this instruction manual carefully before use.
3. After opening the aluminum bag, unused plates should be stored in the aluminum bag and sealed with tape, and kept in a cool (2-15 °C) environment. After opening, use all plates within 1 month.
4. Do not expose unused plates to sunlight or ultraviolet light.
5. Do not use a discolored or damaged plate.
6. A wrinkle on test pad should not affect detection.
7. Small fragments of fabric on/ or around test pad should not affect detection.
8. Do not use the plates after the expiration date. The quality of an expired plate is not warranted.
9. The measurement range is less than 300 cfu/plate. If more than 300 cfu/plate are read, further dilution is recommended.
10. The used kit must be sterilized by autoclaving or boiling, and then disposed according to local regulations for waste.

METHOD VALIDATION

MC-Media Pad YM is approved as alternative method for ISO 21527-1: 2008 by MicroVal (Cer. No. 2015LR51) for all foods with incubation conditions of 25 ± 1 °C and 72 ± 3 hours.
AOAC *Official Method of Analysis*℠ (No. AOAC 2018.02)
AOAC *Performance Tested Method*℠ study (Cer. No. 111401)
MC-Media Pad YM was found to be an effective procedure for enumeration of yeasts and molds in chicken nuggets and yogurt (aw > 0.95) and dry pet food, orange juice concentrate and cake mix (aw < 0.95).

LIMITATION of WARRANTY

The Products are covered by the applicable JNC Corporation standard warranty. NO OTHER EXPRESS OR IMPLIED WARRANTY IS MADE WITH RESPECT TO THE PRODUCTS. JNC EXPRESSLY EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. If product is defective, JNC and JNC's authorized distributor will provide a replacement or refund at the purchase price.

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