# TMP 008 - POTATO DEXTROSE AGAR PLATE

## INTENDED USE
For the isolation and enumeration of yeasts & molds from water, dairy, other food products and clinical samples

## PRODUCT SUMMARY AND EXPLANATION
Potato Dextrose Agar is a simple general-purpose medium that is nutritionally rich, encourages mold sporulation and pigment production. It is recommended by the American Public Health Association (APHA) & FDA for the enumeration and testing of foods and dairy products. This medium is suitable for the detection and enumeration of heat resistant molds in thermally processed fruits and fruit products. Potato Dextrose Agar is also recommended for microbial limit tests in pharmaceutical testing. It is also used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| **Dextrose** | 20.000 |
| **Agar** | 15.000 |
| **Potato infusion from 200 gms** | 4.000 |

## PRINCIPLE
Potato infusion and dextrose (glucose) promote the growth of yeasts and molds while the low pH value partially inhibits the growth of the accompanying bacterial flora. Agar is a solidifying agent.

## INSTRUCTION FOR USE
Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

## QUALITY CONTROL SPECIFICATIONS

| | | |
|---|---|---|
| **Appearance** | : | Light amber colour. |
| **Quantity of Medium** | : | 25ml of medium in 90mm plates. |
| **pH (at 25°C)** | : | 5.6± 0.2 |
| **Sterility Check** | : | Passes release criteria |

## INTERPRETATION
Cultural characteristics were observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Color of the Colony | Recovery | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|---|---|
| *#Aspergillus brasiliensis* | 16404 | 10-100 | Luxuriant | White mycelium with black spores | >=70% | 22-25°C | 4-5 days |
| *Saccharomyces cerevisiae* | 9763 | 50-100 | Luxuriant | Cream | >=70% | 22-25°C | 4-5 days |
| *Candida albicans* | 10231 | 50-100 | Luxuriant | Cream | >=70% | 22-25°C | 3-5 days |

# Formerly known as *Aspergillus niger*

## PACKAGING:
Doubled layered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

## STORAGE

On receipt, store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

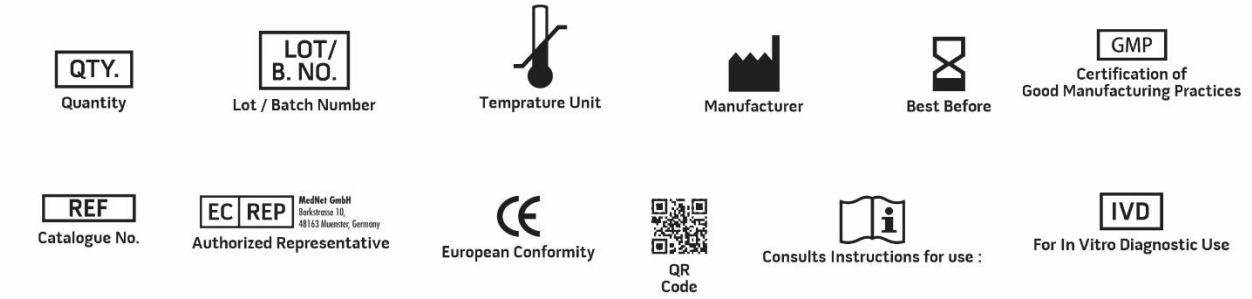
**Product Deterioration:** Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

## DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

## REFERENCES

1. Mac Faddin, J. F. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol.1. Williams & Wilkins, Baltimore, MD. (1985).
2. Marshall, (ed.). Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C. (1993).
3. Association of Official Analytical Chemists. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, MD. (1995).
4. American Public Health Association. Recommended Methods for the Microbiological Examination of Foods. APHA). New York. (1958).
5. Bacteriological analytical manual, 8th ed. AOAC International. Gaithersburg, MD. European Pharmacopoeia 6th edition. (2007).




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

***For Lab Use Only**

**Revision: 22nd March., 2022**