

TSP 004G - POTATO DEXTROSE AGAR PLATE

INTENDED USE

For the subculture of fungi in accordance with harmonized method of USP/EP/BP/JP.

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	:	15-18 ml of medium in 55mm plates.
pH (at 25°C)	:	5.6± 0.2
Dose of Irradiation	:	15.0-25.0 kGy
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics were observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Appearance of colony	Zone Diameter/ Recovery	Incubation Temp.	Incubation Period
<i>Aspergillus brasiliensis</i>	16404	10-100	Luxuriant	White mycelium, black spores	≥ 70%	20-25°C	≤5 Days
<i>Candida albicans</i>	10231	50-100	Luxuriant	Whitish convex, entire dimorphic	≥ 70%	30-35°C	18-48 Hours



<i>Candida albicans</i>	10231	50-100	Luxuriant	Whitish convex, entire dimorphic	≥ 70%	20-25°C	<=3 days
<i>Penicillium commune</i>	10428	Point Inoculation	Good	Cottony green	Good zone diameter	20-25°C	≤ 5 Days
<i>Saccharomyces cerevisiae</i>	9763	50-100	Luxuriant	White to cream	≥ 70%	30-35°C	18-48 Hours
<i>Trichoderma viride</i>	20476	Point Inoculation	Luxuriant	Cottony bluish-green	Good zone diameter	20-25°C	≤ 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.

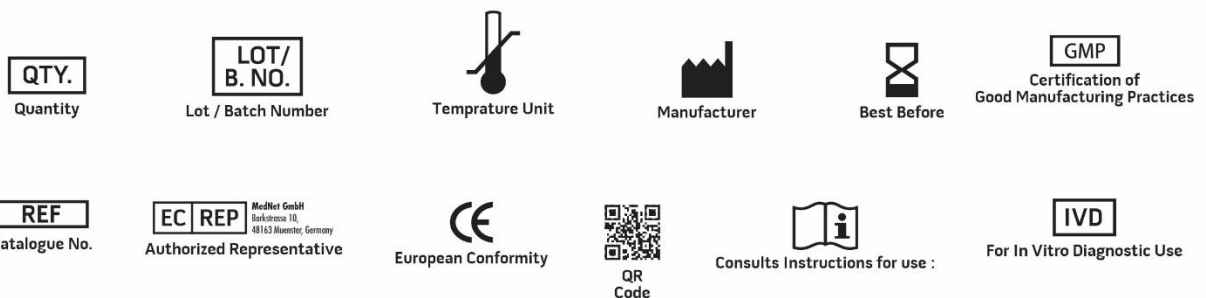
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

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

