TMH 105-POTATO DEXTROSE AGAR (as per USP/BP/EP/JP/IP)

INTENDED USE
For the cultivation of yeasts and molds.

PRODUCT SUMMARY AND EXPLANATION
Potato Dextrose Agar is a simple general-purpose medium that is nutritionally rich, which encourages mold sporulation and pigment production. It is recommended by the American Public Health Association (APHA) for the enumeration and testing of foods and dairy products. This medium is suitable for the detection and enumeration of heat resistant moulds in thermally processed fruits and fruit products. Potato Dextrose Agar, prepared in accordance with the harmonized methodology of USP/EP/BP/JP is 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
Infusion from potatoes	200.000
Dextrose	20.000
Agar	15.000

PRINCIPLE
Potato infusion and dextrose (glucose) promote luxuriant fungal growth. In order to suppress bacterial growth, it is sometimes desirable to acidify the medium to pH 3.5. This can be done by adding 1ml of Lactic Acid 10% to each 100ml of sterilized medium at 50°C. The medium must not be heated after the addition of the acid; this would result in hydrolysis of the agar and destroy its gelling properties.

INSTRUCTION FOR USE
- Suspend 39.00 grams of the medium in 1000 ml distilled water.
- Gently heat to boiling with gentle swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45 - 50°C.
- Mix well and pour as desired.

Note: If pH 3.5 is required, acidify the medium with sterile 10% tartaric acid. The amount of acid required for 100 ml of sterile, cooled medium is approximately 1 ml. Do not heat the medium after addition of the acid.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	:	Cream to yellow colour, homogeneous free flowing powder
Appearance of prepared medium	:	Light amber colour, clear to slightly opalescent gel
pH (at 25°C)	:	5.6±0.2

INTERPRETATION
Cultural characteristics observed after incubation. Recovery rate is considered as 100% for fungus growth on Sabouraud Dextrose Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Appearance of colony	Zone Diameter/ Recovery	Incubation Temp.	Incubation Period

#Aspergillus brasiliensis	16404	10-100	Luxuriant	White mycelium, black spores	≥ 70%	20-25°C	≤5 Days
Candida albicans	10231	50-100	Luxuriant	Whitish convex, entire dimorphic	≥ 70%	30-35°C	18-48 Hours
Candida albicans	10231	50-100	Luxuriant	Whitish convex, entire dimorphic	≥ 70%	20-25°C	<=3 days
Penicillium commune	10428	Point Inoculation	Good	Cottony green	Good zone diameter	20-25°C	≤ 5 Days
Saccharomyces cerevisiae	9763	50-100	Luxuriant	White to cream	≥ 70%	30-35°C	18-48 Hours
Trichoderma viride	20476	Point Inoculation	Luxuriant	Cottony bluish-green	Good zone diameter	20-25°C	≤ 5 Days

#Formerly Known as *Aspergillus niger*.

PACKAGING

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

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

DISPOSAL

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

REFERENCES

1. MacFaddin J., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore
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5. Indian Pharmacopoeia, 2018 Ministry of Health and Family Welfare, Govt. of India.
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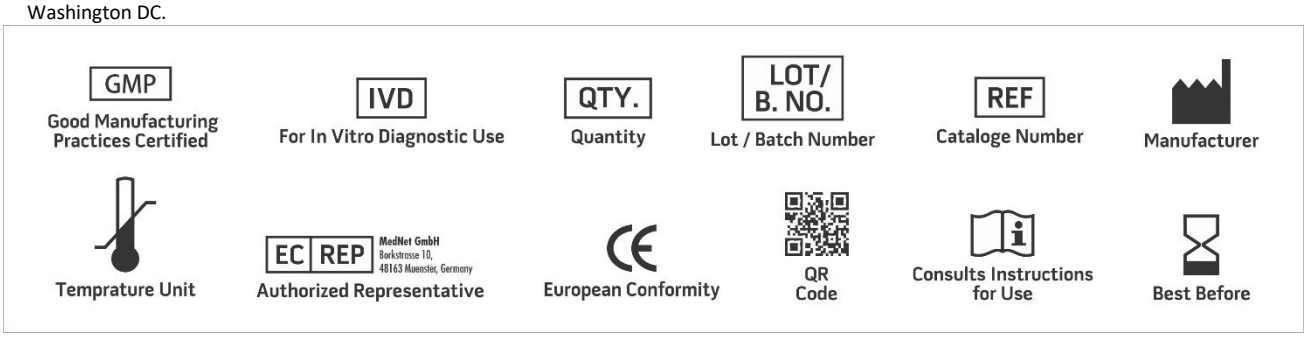
7. American Public Health Association (1992) Compendium of Methods for the Microbiological Examination of Foods 3rd Edition. APHA Inc. Washington DC.



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

***For professional use only.**

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