

TM 2290 – POTATO MALT AGAR

INTENDED USE

For cultivation and maintenance of smut fungi and other phytopathogenic fungi.

PRODUCT SUMMARY AND EXPLANATION

Smuts are fungi that cause plant diseases affecting cereal crops. Potato Malt Agar, formulated as described by Fischer, is used for cultivating and maintaining smut fungi and other phytopathogenic fungi. In addition to smut fungi, this medium can also be used for cultivation of other organisms causing plant disease and aciduric microorganisms, which needs high carbohydrate content and neutral to slight alkaline pH for the optimal growth.

COMPOSITION

Ingredients	Gms / Ltr
Potatoes, infusion from	200.000
Malt extract	20.000
Peptic digest of animal tissue	1.000
Sucrose	60.000
Agar	20.000

PRINCIPLE

This medium consists of Malt extract which contains dextrin, maltose, a little glucose, along with the potato infusion in the medium promotes luxuriant growth of fungi. Peptic digest of animal tissue provides the nitrogenous compounds and trace minerals to the organisms. Sucrose supports the growth of microorganisms such as yeasts.

INSTRUCTION FOR USE

- Dissolve 10.5 grams in 100 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well before pouring into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Aspergillus niger</i>	16404	10-100	Luxuriant	>=70%	25-30°C	40-48 Hours
<i>Candida albicans</i>	10231	10-100	Luxuriant	>=70%	25-30°C	40-48 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Luxuriant	>=70%	25-30°C	40-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Atlas R. M., 2004, Handbook of Microbiological Media, Lawrence C. Parks (Ed.), 3rd Edition, CRC Press.
2. Vanderzant C. and Splittstoesser D. F., (Eds), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington D.C.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
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