

TM 083 – D.T.M. AGAR BASE (DERMATOPHYTE TEST AGAR BASE)

INTENDED USE

For selective isolation of dermatophytes.

PRODUCT SUMMARY AND EXPLANATION

DTM Agar Base was developed by Taplin as a selective and differential medium for detection and identification of dermatophytes. On this medium identification of Dermatophytes are based on morphology and alkaline metabolites production. A combination of three antimicrobial agents (cycloheximide, chlortetracycline and gentamicin) inhibits bacteria and saprophytic yeasts and moulds.

The Dermatophytes are a distinct group of fungi that infect the hair, skin and nails of humans and animals producing a variety of cutaneous infections known as ringworm. Dermatophytes like *Trichophyton*, *Microsporum* and *Epidermatophyton* are responsible for most of the cutaneous fungal infections. Dermatophytes are presumptively identified based on gross morphology and the production of alkaline metabolites, which raise the pH and cause the phenol red indicator to change the color of the medium from yellow to pink-red.

COMPOSITION

Ingredients	Gms / Ltr
Soya peptone	10.000
Dextrose (Glucose)	10.000
Phenol red	0.200
Agar	20.000

PRINCIPLE

The medium consists of Soya peptone which provides nitrogenous and carbonaceous substances essential for growth. Glucose is the energy source. The pH indicator, phenol red, is used to detect amine production. Cycloheximide (as FD) inhibits most of the saprophytic fungi. Gentamicin inhibits gram-negative bacteria including *Pseudomonas* species while chlortetracycline inhibits a wide range of gram-positive and gram-negative bacteria.

INSTRUCTION FOR USE

- Dissolve 20.10 grams in 500 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add the rehydrated contents of one vial of Dermato Supplement.
- Mix well before pouring into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium	: Orange red coloured, slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 5.5 ± 0.2

INTERPRETATION

Cultural characteristics observed with added Dermato Supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Aspergillus brasiliensis</i>	16404	10-100	None-poor	0-10%	-	25-30°C	6 Days
<i>Candida albicans</i>	10231	10-100	Good	40-50%	-	25-30°C	6 Days
<i>Microsporum audouinii</i>	9079	10-100	Good	40-50%	Pink-red	25-30°C	6 Days
<i>Pseudomonas aeruginosa</i>	27853	50-100	None-poor	0-10%	-	25-30°C	6 Days
<i>Trichophyton mentagrophytes</i>	9533	10-100	Good	40-50%	Pink-red	25-30°C	6 Days

PACKAGING:

In pack size of 100 gm and 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. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. Taplin, Zaias, Rebell and Blank, 1969, Arch. Dermatol., 99:203-209.
3. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
4. Kwon-Chung and Bennett, 1992, Medical Mycology, Lea & Febiger, Philadelphia, Pa.
5. Rosenthal S., Stritzler R. and Villafane J., 1968, Arch. Dermatol., 97:685.
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
Revision: 08 Nov., 2019