

# **Technical Data**

# Dixon's Agar (Twin Pack)

M1984

#### **Intended Use:**

Recommended for primary isolation and cultivation of Malassezia furfur.

# Composition\*\*

Ingredients Part A	g/ L
Malt extract	36.000
Peptone	36.000
Bile Dessicated #	20.000
Agar	14.500
Part B	-
Tween 40	10.000
Glycerol mono-oleate	5.000
Final pH ( at 25°C)	$6.0\pm0.2$

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

### **Directions**

Suspend 15ml of fluid Part B in 1000 ml purified / distilled water. Add 106.5 grams of Part A. Mix well and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates or dispense into tubes for slants.

# **Principle And Interpretation**

Malassezia is a lipophilic yeast commence in areas rich in sebaceous glands of the human skin and other warm-blooded animals (1). Media based on malt extract is appreciated by many microbiologists due to their richness and nutrient balance especially for the cultivation of fastidious microorganisms. With acidic pH, they are used for the isolation, cultivation and maintenance of yeast and moulds. M. furfur is a lipophilic yeast, therefore in vitro growth must be stimulated by natural oils or other fatty substances.

Malt extract and Peptone provides nitrogenous compounds. Low pH favours fungal growth and inhibits contaminating bacteria from test samples (2). For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.

#### Type of specimen

Clinical samples - Skin scrapings were done from the edges of the lesion.

#### **Specimen Collection and Handling:**

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).

After use, contaminated materials must be sterilized by autoclaving before discarding.

#### **Warning and Precautions:**

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guide should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

# **Limitations:**

- 1. Due to nutritional variation, some strains may show poor growth.
- 2. Some pathogenic fungi may produce infective spores which are easily dispersed in air.
- 3. Further biochemical tests must be performed for confirmation.

<sup># -</sup> Equivalent to Bile Dessicated

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## **Performance and Evaluation**

Performance of the medium is expected when used as per the direction on the label within expiry period when stored at the recommended temperature.

#### **Quality Control**

#### **Appearance**

Part A: Cream to yellow homogeneous free flowing powder

Part B: Colourless to pale yellow viscous solution

#### Gelling

Firm, comparable with 1.45% Agar gel.

#### Colour and Clarity of prepared medium

Brownish yellow coloured, opalescent gel with scum forms in Petri plates

#### Reaction

Reaction of 10.65% w/v aqueous solution of Part A and 1.5% v/v of Part B at 25°C. pH: 6.0±0.2

#### pН

5.80-6.20

#### **Cultural Response**

Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Candida albicans ATCC 10231(00054*)	50-100	good-luxuriant	>=50%
Candida glabrata ATCC 15126	50-100	good-luxuriant	>=50%
Candida krusei ATCC 24408	50-100	good-luxuriant	>=50%
Candida tropicalis ATCC 750	50-100	good-luxuriant	>=50%
Malassezia furfur ATCC 14521	50-100	good-luxuriant	>=50%

Key: \*Corresponding WDCM numbers.

#### **Storage and Shelf Life**

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

#### **Disposal**

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

#### Reference

- 1. Shah A, Koticha A, Ubale M, Wanjare S, Mehta P, Khopkar U. Identification and speciation of Malassezia in patients clinically suspected of having pityriasis versicolor. Indian J Dermatol 2013;58:239.
- 2. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Yolken RH (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C.
- 3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 4. 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.

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In vitro diagnostic medical device



Storage temperature



CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu





Do not use if package is damaged

#### Disclaimer:

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