

## Dixon's Agar (Twin Pack)

### Intended Use

Dixon's Agar is recommended for primary isolation and cultivation of *Malassezia furfur*.

### Summary

*Malassezia* is a lipophilic yeast that commences in areas rich in sebaceous glands of the human skin and other warm-blooded animals. 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.

### Principle

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

### Formula\*

Ingredients	g/L
<b>Part A</b>	
Malt Extract	36.0
Peptone	36.0
Bile Powder Dessicated <sup>#</sup>	20.0
Agar	14.5
<b>Part B</b>	
Polysorbate 40	10.0
Glycerol Mono-oleate	5.0
Final pH (at 25°C)	6.0 ± 0.2

\*Adjusted to suit performance parameters.

<sup>#</sup>Equivalent to Ox-bile Dessicated

### Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label.

### Type of specimen

Clinical samples - Skin scrapings

### Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration.

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

### Directions

1. Suspend 15mL of fluid part B in 1000mL purified / distilled water. To this add 106.50 g of the powder of part A.
2. Mix well and heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Cool to 45°C-50°C. Mix well pour into sterile petridishes or dispense into tubes for slants.

## Quality Control

### Appearance:

**Part A:** Cream to yellow coloured, homogenous, free flowing powder.

**Part B:** Colourless to pale yellow viscous solution

**Prepared Appearance:** Brownish yellow coloured, opalescent gel with scum forms in petridishes.

**Cultural Response:** Cultural characteristics observed after an incubation of 40-48 hours at 35°C-37°C.

Organisms (ATCC)	Growth
<i>Candida albicans</i> 3147 (10231)	Good
<i>Candida glabrata</i> (15126)	Good
<i>Candida krusei</i> (24408)	Good
<i>Candida tropicalis</i> (750)	Good
<i>Malassezia furfur</i> (14521)	Good

### 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

### Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

### Warranty

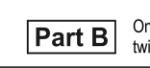
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

### 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. 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, 11<sup>th</sup> Edition. Vol. 1.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2<sup>nd</sup> Edition.
4. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Yolken RH (editors) 2003, Manual of clinical Microbiology, 8<sup>th</sup> ed., ASM, Washington, D.C.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat No.	Product description	Pack Size
201040420500	Dehydrated Culture Media	500 g

 Temperature Limit	 Manufacturer	 LOT Batch Code	 Date of Manufacture	 This way up	 Received on	 Part A One part of twin pack
 Catalogue Number	 Consult Instructions for use	 Use-by Date	 Hygroscopic keep container tightly closed	 Opened on	 Part B One part of twin pack	

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### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.