

# TM 980 – DIAMALT AGAR (as per APHA)

### **INTENDED USE**

For isolation and identification of yeasts from water sample.

### PRODUCT SUMMARY AND EXPLANATION

Fungi including yeasts and filamentous species or moulds are ubiquitously distributed in the environment. The association between fungal densities and organic loading suggests that fungi may be useful indicators of pollution. Fungi have also been found in potable water and on the inner surface of distribution system pipes. Of the total number of fungal colonies obtained from polluted waters, as many as 50% may be yeast colonies.

Diamalt Agar is used for isolation and identification of yeast from water samples as recommended by APHA. Solid media such as Diamalt Agar is used for counting fungal colonies from various samples either directly by using pour plate method or spread plate method or following enrichment. Diamalt Agar is also useful in the purification of yeast isolates and for study of yeast species in various specified tests.

## **COMPOSITION**

Ingredients	Gms / Ltr		
Diamalt	150.000		
Agar	20.000		

#### **PRINCIPLE**

The medium consists of Diamalt which provides an acidic environment with necessary nutrients for growth and metabolism of yeasts. Standard procedures for isolation of fungal and yeast cells should be followed.

# **INSTRUCTION FOR USE**

- Dissolve 17 grams in 100 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. The medium will be turbid but filtration is not necessary.
- Mix well and pour into sterile Petri plates.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Cream to beige homogeneous free flowing powder.

**Appearance of prepared medium**: Dark amber coloured, clear to slightly opalescent gel forms in Petri plates.

**pH (at 25°C)** :  $6.6 \pm 0.2$ 

### **INTERPRETATION**

Cultural characteristics observed after incubation.

Microorganism ATCC Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period	
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Candida albicans	10231	10-100	Luxuriant	>=70%	30 °C	24-48 Hours
Candida lambica	2146	10-100	Luxuriant	>=70%	30 °C	24-48 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.

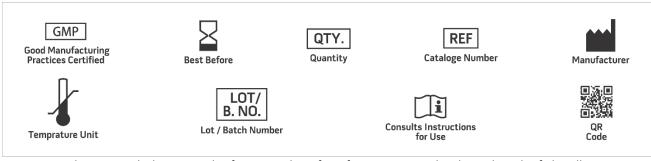
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### **DISPOSAL**

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

### **REFERENCES**

- 1 Nagy L. A. and Olson B. H., 1982, Can. J. Microbiol., 28:667
- 2. Nimi R. M., Kunth S. and Lundstrom K K., 1982, Appl. Environ. Microbiol.,43:378
- 3. Nagy L. A. and Olson B. H., 1985, Proc. American Water Works Assoc. Water Quality Technology Conf., pg. 213
- 4. Clesceri L. S., Greenberg A. E., Eaton A. D., (Eds.), Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998, Published by APHA-AWWA-WPCF, 9-136.



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

\*For Lab Use Only

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