

# **Product Insert**

# YEAST MALT EXTRACT AGAR (YMEA)

#### **Products**

AS-229 Yeast Malt Extract Agar (YMEA) 2 plates / pkg

The following products contain YMEA as one of the multiple components:

AS-227 TSA-TL / YMEA Combo Pack 1 plate each / pkg

#### **Intended Use**

Yeast Malt Extract Agar (YMEA) is an enriched medium intended for the isolation, cultivation, and enumeration of yeast and molds.

### Summary

YMEA is an acidic enriched medium used for the detection and enumeration of yeast and molds. The nutritive base consists of casein, malt extract, and yeast extract which provide a carbon, protein, and other nutrient sources required for the growth of many microorganisms. It is suitable for yeasts and molds as it contains a high concentration of maltose and other saccharides as energy sources. The acidic pH of YMEA is optimal for the growth of yeasts and molds, while being slightly inhibitory towards bacterial growth. This media is prepared, dispensed, and packaged under oxygen-free conditions to prevent the formation of oxidized products prior to use.

#### Formulation\*

Pancreatic Digest of Casein	5.00	g
Malt Extract	3.00	g
Dextrose	10.00	g
Yeast Extract	3.00	g
Agar	20.00	g
DI Water	1.00	L

<sup>\*</sup>Approximate formula. Adjusted and/or supplemented as required to meet performance criteria.

Final pH:  $6.2 \pm 0.3$  at  $25^{\circ}$  C Final weight:  $25.0 \text{ g} \pm 2.5 \text{ g}$ 

### **Precautions**

For IN VITRO DIAGNOSTIC USE only. Utilize approved biohazard precautions and aseptic technique when using this product. This product is for use only by properly-trained and qualified personnel. Sterilize all biohazard waste prior to disposal.

# Storage and Shelf Life

**Storage:** Upon receipt, store at room temperature in original package until used. Avoid overheating or freezing. Do not use media if there are signs of deterioration (shrinking, cracking, or discoloration due to oxidation of media) or contamination. The expiration date applies to the product in its original packaging and stored as directed. Do not use product past the expiration date shown on the label.

Shelf Life: 6 months from date of manufacture.



#### **Procedure**

Methods for Use: See appropriate references for specific procedures.

# Materials Required, But Not Provided

Standard microbiological supplies and equipment such as loops, saline blanks, slides, staining supplies, microscope, incinerator / autoclave, incubators, anaerobic chamber / anaerobic jars, disinfectant, other culture media, and serological / biochemical reagents.

# **Interpretations of Results**

If used properly, YMEA agar will support good growth of many microorganism, including yeast and molds.

#### Limitations

YMEA agar will not provide complete information for identification of microorganisms, including yeast and mold isolates. Additional test procedures and media are required for complete identification. This medium may not support the growth of all clinically significant anaerobes. Consult reference materials for additional information.

### **Quality Control**

The following organisms are routinely used for quality control testing at Anaerobe Systems.

Organism Tested	ATCC #	Results	Time
Saccharomyces cerevisiae	7754	Growth	24 – 48 hrs
Candidia albicans	11006	Growth	24 – 48 hrs
Proteus mirabilis	12453	Growth	24 – 48 hrs
Enterococcus faecalis	29212	Growth	24 – 48 hrs
Escherichia coli	25922	Growth	24 – 48 hrs
Staphylococcus aureus	25923	Growth	24 – 48 hrs

**User Quality Control:** The final determination to the extent and quantity of user laboratory quality control must be determined by the end user.

If sterility testing is to be performed on this product, a representative sample of the lot(s) should be incubated anaerobically and aerobically for 48 - 96 hours.

Physical Appearance: YMEA should appear opaque light-yellow in color.

# References

- 1. Murray, P.R., et al. 2007. Manual of Clinical Microbiology, 9th ed. American Society for Microbiology, Washington, D.C.
- 2. Atlas, R.M. 1995. Handbook of Microbiological Media for the Examination of Food. CRC Press, Boca Raton, LA.
- 3. Koneman, E.W., et al. 2006. *Color Atlas and Textbook of Diagnostic Microbiology,* 6th ed. J.B. Lippincott Company, Philadelphia, PA.
- 4. APHA Technical Committee on Microbiological Methods for Foods. 2001. *Compendium of Methods for the Microbiological Examination of Foods,* 4th ed. APHA, Washington, D.C.
- 5. U.S. Food and Drug Administration. *Bacteriological Analytical Manual*. AOAC, Arlington, VA. <a href="https://www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalManualBAM/default.htm">www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalManualBAM/default.htm</a>

- 6. Ajello, et al. 1963. CDC Laboratory Manual for Medical Mycology, PHS Publication No. 994. U.S. Gov't Printing Office, Washington, D.C.
- 7. Thom, C. and M.B. Church. 1926. *The aspergilli*. Williams & Wilkins Co., Baltimore, MD.
- 8. U.S. Environmental Protection Agency. 2002. "A brief guide to mold, moisture, and your home." Internet: <a href="https://www.epa.gov/iaq/molds/moldguide.html">www.epa.gov/iaq/molds/moldguide.html</a>.

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