MALT EXTRACT AGAR

INTENDED USE
Remel Malt Extract Agar is a solid medium recommended for use in qualitative procedures for isolation and enumeration of yeasts and molds.

SUMMARY AND EXPLANATION
The utilization of malt or malt extracts for the propagation of yeasts and molds is quite common. Reddish described the use of malt extract as a substitute for beer wort in a culture medium.[1] Thom and Church developed Malt Extract Agar, a modification of Reddish's formula, as a general cultivation medium for aspergilli.[2] Malt Extract Agar is recommended for the detection of yeasts and molds in dairy products and other foodstuffs.[3-5]

PRINCIPLE
Malt Extract Agar contains a high concentration of maltose which makes it especially suitable for the growth of yeasts and molds. Dextrin and glycerol are carbon sources and gelatin peptone is a source of nitrogen. The acidic pH of this medium is optimum for the growth of yeasts and molds while inhibiting the growth of bacteria. Agar is a solidifying agent.

REAGENTS (CLASSICAL FORMULA)*

Maltose	12.75	g	Gelatin Peptone	0.78	g
Dextrin	2.75	g	Agar	15.0	g
Glycerol	2.35	g	Demineralized Water	1000.0	ml

pH 4.7 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PRECAUTIONS
This product is For Laboratory Use only. It is not intended for use in the diagnosis of disease or other conditions.

PREPARATION OF DEHYDRATED CULTURE MEDIUM
1. Suspend 33.6 g of medium in 1000 ml of demineralized water.
2. Heat to boiling with agitation to completely dissolve.
3. Sterilize by autoclaving at 121°C for 15 minutes or following established laboratory procedures. **Do not overheat.**
4. Dispense into appropriate containers.

PROCEDURE
1. Consult current editions of appropriate references for the recommended procedure for sample preparation, inoculation, and testing.[4,5]
2. Incubate aerobically for the proper time duration at the appropriate temperature following established laboratory procedures.

QUALITY CONTROL
Each lot number of Malt Extract Agar has been manufactured, packaged, and processed in accordance with current Good Manufacturing Practice regulations. All lot numbers have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures.

CONTROL	INCUBATION	RESULTS
Candida albicans ATCC® 10231	Aerobic, up to 72 h @ 29-31°C	Growth
Cryptococcus neoformans ATCC® 34877	Aerobic, up to 72 h @ 29-31°C	Growth
Trichophyton mentagrophytes ATCC® 9533	Aerobic, up to 72 h @ 29-31°C	Growth

BIBLIOGRAPHY

1. Reddish, G.F. 1919. Abstr. Bacteriol. Proc. 3:6-7.
2. Thom, C. and M.B. Church. 1926. The Aspergilli. Williams & Wilkins, Baltimore, MD.
3. MacFaddin, J.F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams & Wilkins, Baltimore, MD.
4. Downes, F.P. and K. Ito. 2001. Compendium of Methods for the Microbiological Examination of Foods. 4th ed. American Public Health Association, Washington, D.C.
5. Food and Drug Administration. 2000. Bacteriological Analytical Manual Online. AOAC International, Gaithersburg, MD. http://www.fda.gov/Food/ScienceResearch LaboratoryMethods/BacteriologicalAnalyticalManualBAM/ucm055778.htm.

Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, specimen collection, storage and transportation, materials required, quality control, and limitations.

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remel

12076 Santa Fe Drive, Lenexa, KS 66215, USA
General Information: (800) 255-6730 Website: www.remel.com Email: remel@remel.com
Local/International Phone: (913) 888-0939 International Fax: (913) 895-4128