

70196 Wort Agar

General purpose mycological medium especially suitable for the cultivation and enumeration of yeasts. Addition of special indicator dyes allows differentiation between yeast and bacterial colonies (Rapp).

Composition:

Ingredients	Grams/Litre
Malt extract	15.0
Peptone (from casein)	1.0
D-Maltose	12.5
Dextrin	2.5
Dipotassium hydrogen phosphate	1.0
Ammonium chloride	1.0
Agar	17.0

Final pH 4.8 +/- 0.2 at 25°C

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:

Suspend 50 g in 1 litre of distilled water. Add 2.35 g of glycerol (49769) and bring to boiling to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Do not overheat! Prolonged heating will diminish the gel strength of the medium.

Principle and Interpretation:

Peptone and malt extract act as sources of carbon, nitrogen, minerals, vitamins and other essential growth nutrients. D-Maltose, dextrin and glycerol act as sources of carbohydrate. Dipotassium hydrogen phosphate provides buffering capability.

The accompanying bacterial flora is suppressed by the pH value of 4.8. To make it more selective, the addition of approximately 12 ml of filter-sterilized 10 % lactic acid per litre is recommended (pH of about 3.5).

Cultural characteristics after 40-48 hours at 30°C

Organisms (ATCC)	Growth
<i>Aspergillus niger</i> (16404)	+++
<i>Saccharomyces cerevisiae</i> (9763)	+++
<i>Saccharomyces uvarum</i> (9080)	+++
<i>Penicillium notatum</i> (10108)	++
<i>Candida albicans</i> (10231)	+++



References:

1. E.H. Parfitt, J. Dairy Sci. 16, 141 (1933)
2. M. Rapp, Indikatorzusätze zur Keimdifferenzierung auf Würze- und Malzextrakt-Agar, Milchwiss. 29, 341 (1974)
3. B.J. Schaertal, et al., Impedimetric detection of yeast and mold, Food Microbiol. 4, 155 (1987)
4. J.F. Mac Faddin, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore (1985)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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