

Wort Agar

For the cultivation, isolation and enumeration or enrichment of fungi, especially of yeasts.

General Information

According to RAPP (1974), addition of certain indicator dyes to Wort Agar allows differentiation between yeast and bacterial colonies.

Mode of Action

The accompanying bacterial flora is weakly suppressed by the pH value of 5.0 and largely by a pH of 3.5.

Typical Composition (g/litre)

Malt extract 15.0; universal peptone 0.75; maltose 12.75; dextrin 2.75; glycerol 2.35; potassium dihydrogen phosphate 0.4; ammonium chloride 1.0; agar-agar 20.0.

Preparation

Suspend 55 g/litre by heating briefly, dispense into suitable vessels, autoclave (15 min at 121 °C).

■ Do not overheat. If possible do not reliquefy.

pH: 5.0 ± 0.2 at 25 °C.

The prepared medium is clear and brownish.

pH: 3.5: Cool to about 50 °C, add approximately 12 ml of filter-sterilized 10 % lactic acid/litre, mix.

■ Do not reheat.

Experimental Procedure and Evaluation

Inoculate Wort Agar by the pour-plate method or by spreading the sample onto the surface of the medium. Further steps depend on the purpose for which the medium is used.

Incubation: up to 7 days at 28 °C aerobically.

Literature

RAPP, M.: Indikatorzusätze zur Keimdifferentenzierung auf Würze- und Malzextrakt-Agar. – Milchwiss., 29; 341-344 (1974).

Ordering Information

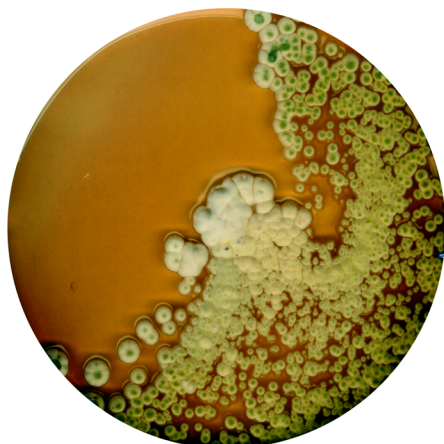
Product	Ordering No.	Pack size
Wort Agar	1.05448.0500	500 g
Wort Agar	1.05448.5000	5 kg
Lactic acid about 90 % purified	1.00366.0500	500 ml

Quality control

Test strains	Growth
Geotrichum candidum DSMZ 1240	good / very good
Penicillium commune ATCC 10428.	good / very good
Aspergillus niger ATCC 16404	good / very good
Trichophyton ajelloi ATCC 28454	fair / good

Quality control (spiral plating method)

Test strains	Inoculum (cfu/ml)	Recovery rate %
Candida albicans ATCC 10231	10^3 - 10^5	≥ 70
Saccharomyces cerevisiae ATCC 9763	10^3 - 10^5	≥ 70
Saccharomyces cerevisiae ATCC 9080	10^3 - 10^5	≥ 70
Rhodotorula mucilaginosa DSMZ 70403	10^3 - 10^5	≥ 70



Penicillium commune ATCC 10428



Rhodotorula mucilaginosa DSMZ 70403