

# TECHNICAL DATA SHEET

Article No. 7772

Wort Agar

## SYNONYMS

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## SPECIFICATION

General solid medium for the cultivation of fungi.

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## FORMULA\* IN G/L

Malt extract	15.00
Casein peptone	0.75
Maltose	12.75
Dextrin	2.75
Dipotassium hydrogen phosphate	1.00
Ammonium chloride	1.00
Agar	17.00

Final pH 4.8 ±0.2 at 25 °C

\*Adjusted and/or supplemented as required to meet performance criteria.

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## DIRECTIONS

Suspend 50.25 g of powder in 1 l of distilled water and add 2-3 ml of glycerol (Ph. Eur., min. 98.0 %). Heat to boiling until completely dissolved. Distribute into suitable containers and sterilize by autoclaving at 121 °C for 15 minutes. Do not overheat. Prolonged heating will diminish the gelling strength of the medium.

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## DESCRIPTION

Wort Agar is used for the cultivation, isolation and enumeration of yeast and moulds. It is particularly well adapted for counting osmophilic yeast in butter, sugar and syrups, in lemonade and more generally in sweet or soft drinks. For a more selective medium it is possible to adjust the pH to 4.5 or 3.5 but this acidification can inhibit the agar solidification. In order to diminish this effect it is advisable to supplement the medium with 10 g/l bacteriological agar. Never heat the medium after adding acid, in order to prevent the loss of solidifying properties of the agar. The acidic pH inhibits the growth of bacteria and favours that of yeast.



## TECHNIQUE

A decimal dilution series is performed from the original sample. Aliquots of 1 ml of each dilution are deposited in sterile Petri dishes. The medium, melted and cooled to 45-50 °C, is poured into the dishes and the mixture is homogenized and allowed to set. Read the plates after incubation for 5 days at 25 °C.

## QUALITY CONTROL

- Incubation temperature: 20-25 °C
- Incubation time: 48 h/5 days
- Inoculum: Practical range 100 ±20 CFU. Min. 50 CFU (productivity), according to ISO 11133:2014/Amd 1:2018. Spiral Plate Method.

Microorganism	Growth	Remarks
<i>Candida albicans</i> ATCC® 10231	Productivity >0.70	None
<i>Saccharomyces cerevisiae</i> ATCC® 9763	Productivity >0.70	None
<i>Aspergillus brasiliensis</i> ATCC® 16404	Productivity >0.70	None

## REFERENCES

- ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- MBAA (2002) The Practical Brewer. 3rd ed. Masters Brewers Association of the Americas. Saint Paul. Minnesota.
- PASCUAL ANDERSON. M<sup>a</sup>.R<sup>o</sup>. (1992) Microbiología Alimentaria. Díaz de Santos, S.A. Madrid.
- RAPP, M. (1974) Indikator-zusätze zur Keimdifferenzierung auf Würze und Malzextrakt-Agar. Milchwiss. 29: 341 -344.
- SCARR (1959) Selective media used in the microbiological examination of sugar products. J. Sci. Food Agric. 10:678-681.

## STORAGE

Keep tightly closed, away from light, in a dry place (4-30 °C).

## SHELF LIFE

5 years from date of production

updated: 17.03.2023

