

53493 Wort Broth

Wort Broth is commonly used for the detection and enumeration of fungi, particularly yeasts in butter, syrups, and other materials, especially in the soft drinks industry and breweries.

Composition:

Ingredients	Grams/Litre
Malt Extract	15.0
Dextrin	2.5
Dipotassium phosphate	1.0
Maltose	12.5
Casein peptone	1.0
Ammonium chloride	1.0
Final pH (at 25°C)	4.8 ± 0.2

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 33.0 grams of the medium in one liter of distilled water, add 2-3 g of glycerol. Heat until boiling and the medium has dissolved completely.

Distribute into appropriate containers and sterilize at 121°C for 15 minutes.

Principle and Interpretation:

Wort Broth is for the cultivation of fungi especially yeasts in syrups and butter. Wort Broth is especially formulated for the dedicated growth of yeasts and often it has been employed as a partial selective enrichment medium.

The casein peptone and malt extract are natural sources of fermentable carbohydrates, nitrogenous substances and other essential growth nutrients for the organisms.

The dextrin and maltose are the easy fermentable carbohydrate sources for yeasts and serve as the source of energy for the organisms. The potassium phosphate buffers the medium. The highly acidic pH inhibits most bacteria while yeast grow well. Ammonium chloride working as a yeast nutrient, supplying nitrogen and as an acidifier.

Cultural characteristics after 40-48 hours at 25-30°C.

Organisms (ATCC)	Inoculum	Growth
<i>Candida albicans</i> (10231)	50-100	+++
<i>Saccharomyces uvarum</i> (9763)	50-100	+++
<i>Saccharomyces cerevisiae</i> (28098)	50-100	+++
<i>Aspergillus brasiliensis</i> (DSM 1988, ATCC 16404)	50-100	+++

References:

1. Parfitt, J. Dairy Sci., 19: 141 (1933)

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.

