

## WORT BROTH

**CAT Nº: 1444**

For the cultivation and enumeration of yeasts

### FORMULA IN g/l

Malt Extract	15.00	Casein Peptone	1.00
D-Maltose	12.50	Dipotassium Phosphate	1.00
Dextrin	2.50	Ammonium Chloride	1.00

**Final pH 4.8 ± 0.2 at 25°C**

### PREPARATION

Suspend 33 grams of the medium in one liter of distilled water. Add 2-3 ml of Glycerol. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

### USES

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.

Yeasts grow well on media that contain dextrose or maltose, moreover if the reaction is acidic. This medium has been enriched with the addition of salts and other nutrients. Malt extract and Casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Dextrin is a carbon source. Dipotassium phosphate is the buffer. Glycerol reduces the water activity from 0.999 to 0.95, thereby reducing bacterial growth.

The low pH inhibits the growth of most bacteria. Incubate at 30°C and observed after 40-48 hours.

### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures, with Glycerol added, after incubation, at a temperature of 30°C and observed after 40-48 hours.

Microorganisms	Growth
<i>Aspergillus brasiliensis</i> ATCC 16404	Good
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good
<i>Saccharomyces uvarum</i> ATCC 9080	Good

### BIBLIOGRAPHY

J. Dairy Science, 16: 141,

RAPP Milchwiss, 29, 341-344 (1974)

### STORAGE





Once opened keep powdered medium closed to avoid hydration.