

Linden Grain broth

Code 84951.0500
84951.5000

Also known as

Linden Grain Medium

Intended use

For the cultivation of environmental microorganisms as a part of media fill process simulation for beverage bottling.

Formula* - Composition in g/L

Glucose anhydrous.....	20.0
Yeast Extract	3.5
Enzymatic digest of casein.....	2.0
Ammonium sulphate.....	2.0
Potassium dihydrogen phosphate.....	1.0
Magnesium sulphate.....	1.0

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

Final pH 4.2 ± 0.2 at 25 °C.

Instructions for preparation

Dissolve 29.5 g in 1 L of purified water by bringing to the boil with frequent shaking, if necessary. Dispense the medium into flasks of suitable capacity and sterilise in the autoclave at 121 °C for 15 minutes.

Principle of the method and general information

Linden Grain broth is a general purposes medium with an acid pH, suitable for the cultivation of environmental microorganisms as a part of media fill process simulation for beverage bottling. Media fill trial is an effective method for verifying the effectiveness of low-acid beverage sterilization procedures.

Instruction for use

Linden Grain broth, a microbiologically sensitive medium, is sterilized, aseptically filled into sterile packs and incubated for total viable count, yeast and mould. The microbial content of the media-filled packs must show an absence of growth.

The liquid medium permits the growth of organisms that can spoil low acid beverages. Presence of these organisms is indicated by turbid growth in the broth.

Quality Control

Physical characteristics:

Appearance of powder

Appearance of prepared medium

pH (25°C)

Whitish, fine, homogeneous, hygroscopic powder

Pale yellow, limpid

4.2 ± 0.2

Microbiological characteristics:

Test Strains	Incubation T° / t / At.	Inoculation method	Growth characteristics	Productivity Ratio
<i>C. albicans</i> ATCC 10231	25 °C/ 72 H / AE	DE	Good growth	DDI ≤ 1
<i>C. tropicalis</i> CB 1910	25 °C/ 72 H / AE	DE	Good growth	DDI ≤ 1
<i>S. cerevisiae</i> ATCC 9763	25 °C/ 72 H / AE	DE	Good growth	DDI ≤ 1
<i>A. brasiliensis</i> ATCC 9642	25 °C/ 72 H / AE	DE	Good growth	DDI ≤ 1
<i>P. chrysogenum</i> ATCC 10106	25 °C/ 72 H / AE	DE	Good growth	DDI ≤ 1

Notes

DE: dilution to extinction method

DDI : Highest dilution showing growth on reference culture medium (RB) - highest dilution showing growth on culture medium under test (TB)
(considering the index as a positive value, e.g. 10^{-9} : 9)

°Target organisms: DDIs 1: the growth on TB shall be non more than 1 dilution lower than RB

Incubation atmosphere AE: aerobic incubation

CB: laboratory culture collection; ATCC is a registered trade mark of American Type Culture Collection

Storage conditions

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+10°C to 30 °C and <60% RH).

Ordering information

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Bottle of 500 g
Drum of 5 kg