

## Yeast Mold Broth (i23206)

For cultivating yeasts, molds and other aciduric microorganisms.

Industry: Food

## Principles & Uses

Yeast and Mold Broth, formulated by Wickerham, is designed for the cultivation of yeast, molds, and aciduric microorganisms. This medium offers a rich source of carbon, protein, and nutrients through peptone and malt extract. The malt extract, with a high maltose concentration, serves as an energy source, especially suitable for yeasts and molds. Dextrose acts as the fermentable carbohydrate, providing carbon and energy to microorganisms. The presence of necessary growth factors in yeast extract supports the overall growth of yeast and mold.

The selective nature of the medium, with its high dextrose concentration and acidic pH, makes it particularly suitable for the isolation and cultivation of fungi.

## Composition (gr/L)

Peptone 5 g, Yeast Extract 3 g, Malt Extract 3 g, Dextrose 10 g.

Final pH at 25°C 6.2 ± 0.2

## Preparation from dehydrated Powder

Suspend 21 g in 1 liter of distilled water and mix thoroughly. Autoclave at 121°C for 15 minutes. To increase selectivity, acidify the medium to pH 3.0 to 4.0 (by adding sterile 10% HCl, tartaric acid or 10% citric acid) or add antibiotics (penicillin 20 units per mL final concentration or streptomycin 40 µg per mL final concentration) using aseptic technique.

## Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Light to medium amber, clear to very slightly opalescent. At pH adjusted to 3.0-4.0, medium becomes slightly opalescent.

Reaction of 2.1% Solution at 25°C: pH 6.2 ± 0.2

## Cultural Response

Prepare two sets of broth tubes. One set is adjusted to pH 6.2, another set is adjusted to pH 3.0 - 4.0. Inoculate and incubate at 30 ± 2°C for 18 - 72 hours.

Organism (ATCC*)	Recovery pH 3.0-4.0	Recovery pH 6.2
<i>Aspergillus brasiliensis (niger)</i> (16404)	Good	Good
<i>Candida albicans</i> (10231)	Good	Good
<i>Escherichia coli</i> (25922)	Marked to complete inhibition	Good
<i>Lactobacillus rhamnosus</i> (7469)	Poor to fair	Good
<i>Saccharomyces Cerevisiae</i> (9763)	Good	Good

\*ATCC is a registered trade mark of the American Type Culture Collection.



*Saccharomyces cerevisiae* (left). *Candida albicans* (middle). Prepared Culture Media (right). The pH of the medium is adjusted to 6.2.

## Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.