

## Corn Meal agar (i23050)

Used in qualitative procedures as a general-purpose medium for cultivation of *fungi* and also for chlamyospore production by *Candida albicans* and for the maintenance of fungal stock cultures.

Industry: Food / Clinical

## Principles & Uses

Corn Meal Agar is a versatile medium used for cultivating fungi, with a particular focus on *Candida species* and chlamyospore production. Chlamyospores are a significant criterion for identifying *Candida* species, particularly *Candida albicans*, the causative agent of Candidiasis. This medium contains corn meal infusion, which provides essential nutrients for fungal growth, such as nitrogen, vitamins, minerals, and amino acids.

The addition of dextrose (2 gr/L) enhances the growth of some fungi, while the incorporation of polysorbate 80 (1%), a mixture of oleic esters, stimulates the formation of chlamyospores by *Candida* species, including *C. albicans*, *C. stellatoidea*, and *C. tropicalis*. Some *Candida* strains may lose their chlamyospore-forming ability through repeated subculturing.

## Composition (gr/L)

Corn Meal Extract (from 50 g of whole maize) 2, Agar 15.

Final pH at 25°C 6.0 ± 0.2

## Preparation from dehydrated Powder

Suspend 17 g in 1 Litre of distilled water. Adjust pH to 6.0 ± 0.2 at 25°C. Sterilise by autoclaving at 121°C for 15 minutes.

## Quality Control

Dehydrated Appearance: Cream to yellow, free-flowing, homogeneous.

Prepared Appearance: Amber, slightly opalescent.

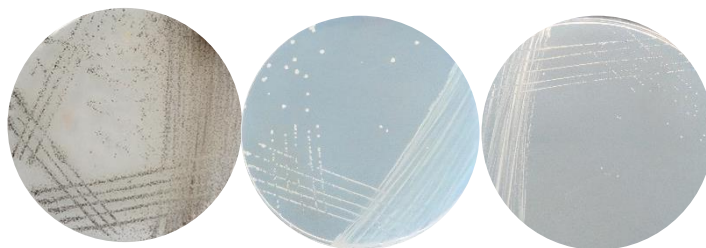
Reaction of 1.7% Solution at 25°C: pH 6.0 ± 0.2

## Cultural Response

Cultural characteristics were observed after incubation at 25-30°C for up to 4 days (up to 4 weeks if necessary).

Organism (ATCC*)	Growth	Chlamyospores
<i>Candida albicans</i> (10231)	Good	Positive
<i>Aspergillus brasiliensis</i> (16404)	Good	Negative
<i>Saccharomyces cerevisiae</i> (9763)	Good	Negative

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



*Aspergillus brasiliensis* (left). *Saccharomyces cerevisiae* (middle). *Candida albicans* (right).

## Storage

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