

# Glucose Chloramphenicol Agar

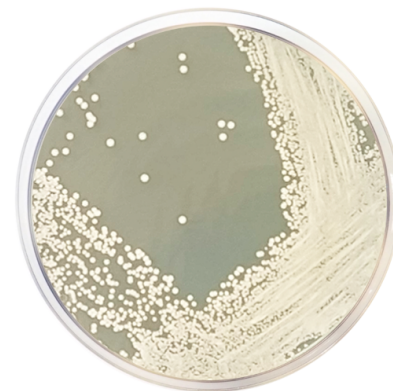
Cat. 1094

Selective medium for the isolation and enumeration of yeasts and molds in milk and dairy products

## Practical information

Applications	Categories
Selective enumeration	Yeasts and molds

Industry: Dairy products



## Principles and uses

Glucose Chloramphenicol Agar is recommended by the International Dairy Federation (FIL-IDF) for the isolation and enumeration of yeasts and molds in milk and dairy products.

Yeast extract is the water-soluble portion of hydrolyzed yeast and is a source of vitamins, particularly of the B-group, and other growth nutrients that stimulate yeast and mold development. Glucose is the fermentable carbohydrate as a carbon and energy source. Chloramphenicol is an antibiotic which aids in isolating pathogenic fungi from heavily contaminated material, as it inhibits most contaminating bacteria. It is a recommended antibiotic for use with media due to its heat stability and wide bacterial spectrum. Bacteriological agar is the solidifying agent.

## Formula in g/L

Glucose	20	Bacteriological agar	15
Chloramphenicol	0,2	Yeast extract	5

## Preparation

Suspend 40,2 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 50 °C, mix well and dispense into plates.

## Instructions for use

Inoculation method:

- Transfer to an empty Petri dish 1 ml of the test sample, if liquid, or 1 ml of the initial suspension in the case of other products.
- Prepare dilutions if needed.
- Pour about 15 ml of the medium Glucose Chloramphenicol Agar previously melted and maintained at 45 °C in the water bath into each Petri dish.
- Carefully mix the inoculum with the medium by rotating the Petri dish and allow the mixture to solidify. The time taken between the preparation of the first dilution and the mixing of the inoculum with the medium shall not exceed 15 min.
- Incubate the dishes in an inverted position at 25 °C for 5 days.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Light amber	6,6±0,2

## Microbiological test

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Incubation conditions: (25-30 °C / 3-7 days).

Microorganisms	Specification
Aspergillus spp	Good growth
Candida albicans ATCC 2091	Good growth
Escherichia coli ATCC 25922	Inhibited growth
Staphylococcus aureus ATCC 25923	Inhibited growth
Lactobacillus rhamnosus ATCC 9595	Inhibited growth

## Storage

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Temp. Min.:2 °C  
Temp. Max.:25 °C

## Bibliography

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FIL-IDF(1991) Standard 94B. Enumeration of yeast and moulds. Colony Count Technique at 25 °C.  
ISO (1981) ISO/DIS 6611: Milk and Milk products: Enumeration of yeast and moulds colony count technique at 25 °C.  
DIN Standard 10186. Mikrobiologische Milchuntersuchung. Bestimmung der Anzahl von Hefen und Schimmelpilzen.