Chloramphenicol Agar (YGC Agar) ISO

Cat. 1301

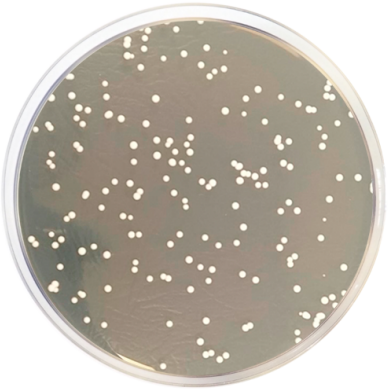
Selective medium for the isolation and enumeration of molds in milk and dairy products

Practical information

Aplications	Categories
Selective enumeration	Yeasts and molds
Selective isolation	Yeasts and molds

Industry: Dairy products / Antimicrobial susceptibility testing

Regulations: ISO 6611



Principles and uses

Chloramphenicol Agar (YGC Agar) is recommended by the International Dairy Federation (FIL-IDF), International Organization for Standardization (ISO), and Deutsche Institute für Normung (DIN) for the selective isolation and enumeration of yeasts and molds in milk and dairy products.

The antibiotic method for enumerating yeasts and molds in dairy products is the preferred method of choice as it results in a better recovery of injured fungal cells.

Yeast extract is a source of vitamins, particularly of the B-group essential for bacterial growth. Dextrose is the fermentable carbohydrate providing carbon and energy and 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

Dextrose	20	Bacteriological agar	12
Chloramphenicol	0,1	Yeast extract	5

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 37,1 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 ºC for 15 minutes. Cool to 50 ºC, mix well and dispense into plates.

Instructions for use

For the enumeration of yeast and molds in milk products according to ISO 6611:
- Transfer 1 ml of the test sample (liquid product) or the initial suspension (other products), to two Petri dishes.
- Transfer 1 ml of the 10-1 dilution (liquid product) or 1 ml of the 10-2 dilution (other products) to two further Petri dishes.
- If necessary, repeat using more dilutions.
- Pour about 15 ml of the Chloramphenicol Agar (YGC) (Cat. 1301), previously melted and cooled, into each Petri dish.
- Mix gently the inoculum with the medium allowing the mixture solidifying.
- Incubate the dishes at 25 ºC for 5 days.
- Count the colonies in each dish, differentiating yeast from molds by colony morphology.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine pwoder	Beige	Amber, slightly opalescent	6,6 ± 0,2

Microbiological test

Incubation conditions: (25 ºC / 3-5 days).
Inoculation conditions: Productivity quantitative (100±20. Min. 50 CFU) / Selectivity (10^4-10^6 CFU).
Reference media: Dextrosa Saboraud Agar.

Microorganisms	Specification
Candida albicans ATCC 10231	Good growth
Aspergillus brasiliensis ATCC 16404	Good growth
Escherichia coli ATCC 25922	Inhibited growth
Staphylococcus aureus ATCC 25923	Inhibited growth
Saccharomyces cerevisiae ATCC 9763	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

FIL-IDF(1991) Standard 94B. Enumeration of yeast and moulds. Colony Count Technique at 25°C.
ISO 6611: Milk and Milk products: Enumeration of colony-forming units of yeast and/or molds- Colony count technique at 25°C.
ISO 7954- Microbiology – General Guidance for enumeration of yeasts and molds. Colony count technique at 25ºC
DIN Standard 10186. Mikrobiologische Milch Untersuchung. Bestimmung der Anzahl von Hefen und Schimmelpilzen