



CHLORAMPHENICOL GLUCOSE AGAR

INTENDED USE

Chloramphenicol Glucose Agar is destined for the detection and enumeration of yeasts and molds in dairy and other food products.

PRINCIPLES

- Yeast extract and glucose favor the growth of yeasts and molds.
- The presence of chloramphenicol, a heat-stable antibiotic, inhibits the growth of contaminating bacteria.
- Gentamicin, added extemporaneously, increases selectivity particularly when analyzing meat and raw seafood products, often contaminated with Gram-positive bacteria.

PREPARATION

- Suspend 40.1 g of dehydrated medium (BK007) in 1 liter of distilled or deionized water.
- Slowly bring to boiling, stirring with constant agitation until complete dissolution.
- Dispense at 100 mL per flask.
- Sterilize in an autoclave at 121°C for 15 minutes.

With the ready-to-use media BM021 or BM079 (or if the media is prepared in advance from the dehydrated product), melt the agar for the minimum amount of time necessary to achieve total liquefaction.

NOTE :

Incomplete agar melting during preparation will invariably lead to significant inconsistency in the gel strength of the solidified agar, after sterilization and cooling.

INSTRUCTIONS FOR USE

- Cool and maintain at 44-47°C.
- If necessary, add the reconstituted Gentamicin Selective Supplement (BS009) according to the protocol being followed. Consult the monograph concerning this product for more information.
- Transfer 1 mL of the product to analyze and its serial tenfold dilutions to sterile Petri dishes.
- Pour 10 to 15 mL of medium.
- Homogenize by swirling.
- Let solidify on a cold surface.
- Incubate at 25°C for 3 and 5 days. Do not invert the plates during incubation and between readings, in order to avoid reinoculation of the agar surface with mold spores.

NOTE :

Inoculation can also be performed on the agar surface, using pre-poured Petri dishes. In this case, inoculate 0.1 mL of the appropriate serial dilution to the surface of the plate.

RESULTS

Separately count yeasts and molds. Carry out a confirmation test under the microscope on each type of colony encountered.

TYPICAL COMPOSITION of media (without Gentamicin)

(can be adjusted to obtain optimal performance)

For 1 liter of medium :

- Yeast extract5.0 g
- Glucose20.0 g
- Chloramphenicol0.1 g
- Bacteriological agar15.0 g

pH of the ready-to-use medium at 25°C : 6.6 ± 0.2.

QUALITY CONTROL

- Dehydrated medium : beige powder, free-flowing and homogeneous.
- Prepared medium : amber agar.
- Typical culture response after 72 hours of incubation at 25°C :

Microorganisms		Growth (Productivity ratio : P_R)
<i>Saccharomyces cerevisiae</i>	ATCC® 9763	$P_R \geq 50\%$
<i>Candida albicans</i>	ATCC 10231	$P_R \geq 50\%$
<i>Aspergillus brasiliensis</i>	DSM 799	$P_R \geq 50\%$
<i>Escherichia coli</i>	ATCC 25922	inhibited
<i>Bacillus subtilis</i>	ATCC 6633	inhibited

STORAGE / SHELF LIFE

Dehydrated medium (without Gentamicin) : 2-30°C.

- The expiration date is indicated on the label.

Prepared medium (benchmark value*) :

- Media in vials : 6 months at 2-8°C.
- Media in plates : 1 month at 2-8°C.

Ready-to-melt media in vials

Gentamicin selective supplement :

- Store between 2-8°C, shielded from light.
- The expiration dates are indicated on the labels.

PACKAGING

Code

Ready-to-melt media (without Gentamicin) :

- 10 x 100 mL vials BM02108
- 10 x 200 mL vials BM07908

Dehydrated media (without Gentamicin) :

- 500 g bottle BK007HA

Gentamicin Selective Supplement :

- 10 vial pack BS00908

BIBLIOGRAPHY

NF ISO 7954. Août 1988. Microbiologie. Directives générales pour le dénombrement des levures et moisissures. Technique par le comptage des colonies à 25°C.

NF ISO 7698. Août 1991. Céréales, légumineuses et produits dérivés. Dénombrement des bactéries, levures et moisissures.

NF V08-059. Novembre 2002 (3ème tirage Août 2003). Microbiologie des aliments. Dénombrement des levures et moisissures par comptage des colonies à 25°C. Méthode de routine.

ISO 6611 FIL-IDF 94: 2004. Lait et produits laitiers. Dénombrement des unités formant colonies de levures et/ou moisissures. Comptage des colonies à 25°C.

XP CEN ISO/TS 11133-2. Janvier 2004. Microbiologie des aliments. Guide pour la préparation et la production des milieux de culture. Partie 2 : guide général pour les essais de performance des milieux de culture.

NF EN 15789 (V 18-239). Décembre 2009. Aliments des animaux. Isolation et dénombrement de souches probiotiques de levures (*Saccharomyces cerevisiae*).

*Benchmark value refers to the expected shelf life when prepared under standard laboratory conditions following manufacturer's instructions. It is provided as a guide only and no warranty, implied or otherwise is associated with this information.

The information provided on the package or instructions take precedence over the information described in this document.

The information and specifications contained in this technical data sheet date from 2010-01-13.

They are susceptible to modification at any time, without warning.

Code document : BK007/A/2003-01 :8.