

## YEAST GLUCOSE CHLORAMPHENICOL AGAR

APPLICATION	Chloramphenicol Yeast Glucose Agar is a selective medium recommended for selective enumeration of yeasts and moulds in milk and milk products										
PRINCIPLE AND INTERPRETATION	<p>Chloramphenicol Yeast Glucose Agar is a selective medium recommended for isolation and enumeration of fungi-yeasts and moulds in milk and milk products <sup>1,2,3</sup> Recently this medium has been recommended by ISO committee for the enumeration of yeasts and moulds <sup>4</sup>. The medium contains yeast extract, which provides nitrogenous nutrients and vitamin B complex.</p> <p>Dextrose is the energy source. Chloramphenicol, a thermostable antibiotic, suppresses accompanying bacterial flora. This improves shelflife of the prepared medium and the prepared medium can be used over a period of at least 4 months <sup>5</sup></p> <p>Technique: Take two sterile Petri plates and transfer 1 ml of sample (if liquid) or 1 ml of the initial suspension in case of other products. Further take another two sterile plates and transfer 1 ml of 10-1 dilution to each sterile Petri plate or 1 ml of 10-2 dilution for other products. Repeat the procedure using further dilutions if necessary. Pour about 15 ml of Chloramphenicol Yeast Glucose Agar (5) previously melted and maintained at 45 ± 1°C. The time elapsing between the end of the preparation of the initial suspension and the moment when the medium is poured into the dishes shall not exceed 15 minutes. Carefully mix the inoculum with the medium and allow it to solidify. Prepare control plate to check the sterility. Incubate the plates at 25 ± 1°C. Count the colonies on each plate after 3, 4 and 5 days incubation. It is necessary to carry out a microscopic examination in order to distinguish, according to their morphology, the colonies of yeast and moulds from colonies of bacteria.</p> <p>It is advisable to examine the plates at the end of three days for yeast colonies, as they are likely to be overgrown by mould growth. Make a separate count of yeast colonies, which are characterized, as smooth, moist, elevated surface colonies. Count mould colonies, which are recognized by their profused growth of hyphae. If only yeast counts are required, add 0.25% of sterile sodium propionate solution to the medium at the time of preparation of plates to inhibit the growth of moulds <sup>6,7</sup></p>										
MEDIUM COMPOSITION*	<p>Yeast extract.....5.000 g/l                  Dextrose.....20.000 g/l                  Chloramphenicol.....0.100 g/l                  Agar.....14.90 g/l</p> <p>Final pH : 6.6 ± 0.2</p> <p>* Adjusted and/or supplemented to meet performances criteria</p>										
STORAGE	<p>+2°/+8°C                  Protect from light, excessive heat, moisture and freezing</p>										
QUALITY CONTROL	<p><b>Growth Promotion Test:</b></p> <table border="1" data-bbox="507 1771 1477 1904"> <thead> <tr> <th data-bbox="507 1771 671 1839">Control strain</th> <th data-bbox="671 1771 979 1839">Medium inoculation level</th> <th data-bbox="979 1771 1225 1839">Incubation Conditions</th> <th data-bbox="1225 1771 1477 1839">Recovery Specifications</th> </tr> </thead> <tbody> <tr> <td data-bbox="507 1839 671 1904"><i>S. cerevisiae</i> ATCC 9763</td> <td data-bbox="671 1839 979 1904">10-100 viable microorganisms</td> <td data-bbox="979 1839 1225 1904">48-120 h at 22.5 ± 2.5°C</td> <td data-bbox="1225 1839 1477 1904">70% ≤ R% ≤ 200%</td> </tr> </tbody> </table>			Control strain	Medium inoculation level	Incubation Conditions	Recovery Specifications	<i>S. cerevisiae</i> ATCC 9763	10-100 viable microorganisms	48-120 h at 22.5 ± 2.5°C	70% ≤ R% ≤ 200%
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<sup>1</sup> DIN Deutsches Institut für Normung e.v. referenzverfahren DIN 10186.

<sup>2</sup> International Organization for Standardization (ISO), Draft ISO/DIS 6611.

<sup>3</sup> Internationaler Milchwirtschaftsverband: Internationaler IMV-Standard 94 1980.

<sup>4</sup> International Organization for Standardization (ISO), 1987, Draft ISO/DIS 7954.

<sup>5</sup> Engel G., 1982, Milchwiss., 37:727.

<sup>6</sup> International Organization for Standardization (ISO), 1999, ISO 5403:1999.

<sup>7</sup> European Pharmacopoeia, current edition

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	<i>C. albicans</i> ATCC 10231	10-100 viable microorganisms	48-120 h at 22.5 ± 2.5°C	70%≤R%≤200%
	<i>A. brasiliensis</i> ATCC 16404	10-100 viable microorganisms	48-120 h at 22.5 ± 2.5°C	70%≤R%≤200%
	<i>E. coli</i> ATCC 8739	≥100 viable microorganisms	72-120 h at 22.5 ± 2.5°C	Inhibited
<p><b>Sterility control:</b> no growth</p> <p><b>Appearance:</b> Amber coloured, clear to slightly opalescent gel forms in plates</p>				
GENERAL WARNING NOTES	<p>Device must be handled according to asepsis precautions, of utilization of culture media is strictly referred to the type of analysis that must be done. Please refer to specific norms and procedures. Do not use if device is broken. Do not use if media shows accidental contamination signs. Do not utilize after expiry date. Let device reach room temperature before utilizing. Results interpretation must be done by qualified personnel, who must consider context of use.</p> <p>Disposal of waste must be carried out according to national and local regulations in force.</p>			

**This product is available in:**

➤ **Non Gamma irradiated media plates**

MODEL	PRODUCT CODE	ORDER CODE	DESCRIPTION	SHELF LIFE
Ø90mm	1008/10	1008/10.100 (100 pcs/pack)	<b>Filling volume:</b> 24ml <b>Packaging:</b> single wrapped (S.W.)	3 months