

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 ^{1,2,3} Recently this medium has been recommended by ISO committee for the enumeration of yeasts and moulds ⁴. 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 ⁵</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 $45 \pm 1^\circ\text{C}$. 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 $25 \pm 1^\circ\text{C}$. 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 ^{6,7}</p>												
MEDIUM COMPOSITION*	<table border="0"> <tr> <td>Yeast extract</td> <td>.....</td> <td>5.00 g/l</td> </tr> <tr> <td>Dextrose</td> <td>.....</td> <td>20.00 g/l</td> </tr> <tr> <td>Chloramphenicol</td> <td>.....</td> <td>0.100 g/l</td> </tr> <tr> <td>Agar</td> <td>.....</td> <td>15.00 g/l</td> </tr> </table> <p>Final pH : 6.6 ± 0.2</p> <p>* Adjusted and/or supplemented to meet performances criteria</p>	Yeast extract	5.00 g/l	Dextrose	20.00 g/l	Chloramphenicol	0.100 g/l	Agar	15.00 g/l
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¹ DIN Deutsches Institut für Normung e.v. Referenzverfahren DIN 10186.

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

³ Internationaler Milchwirtschaftsverband: Internationaler IMV-Standard 94 1980.

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

⁵ Engel G., 1982, Milchwiss., 37:727.

⁶ International Organization for Standardization (ISO), 1999, ISO 5403:1999.

⁷ European Pharmacopoeia, current edition

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STORAGE	+2°/+8°C Protect from light, excessive heat, moisture and freezing																								
QUALITY CONTROL	<table border="1" data-bbox="507 488 1485 1048"> <tr> <td colspan="3" data-bbox="507 488 1485 524">Growth Promotion Test: 10-100 viable microorganisms⁸</td> </tr> <tr> <td data-bbox="507 528 759 591">Control strain</td> <td data-bbox="762 528 1101 591">Incubation Conditions</td> <td data-bbox="1104 528 1485 591">Specifications</td> </tr> <tr> <td data-bbox="507 595 759 658"><i>S. cerevisiae</i> ATCC 9763</td> <td data-bbox="762 595 1101 658">48-120 h at 22.5 ± 2.5°C</td> <td data-bbox="1104 595 1485 658">70%≤R%≤200%</td> </tr> <tr> <td data-bbox="507 663 759 725"><i>C. albicans</i> ATCC 10231</td> <td data-bbox="762 663 1101 725">48-120 h at 22.5 ± 2.5°C</td> <td data-bbox="1104 663 1485 725">70%≤R%≤200%</td> </tr> <tr> <td data-bbox="507 730 759 792"><i>A. brasiliensis</i> ATCC 16404</td> <td data-bbox="762 730 1101 792">48-120 h at 22.5 ± 2.5°C</td> <td data-bbox="1104 730 1485 792">70%≤R%≤200%</td> </tr> <tr> <td data-bbox="507 797 759 860"><i>E. coli</i> ATCC 8739</td> <td data-bbox="762 797 1101 860">72-120 h at 22.5 ± 2.5°C</td> <td data-bbox="1104 797 1485 860">Inhibited</td> </tr> <tr> <td colspan="2" data-bbox="507 896 1101 963">Sterility control</td> <td data-bbox="1104 896 1485 963">no growth</td> </tr> <tr> <td colspan="2" data-bbox="507 967 1101 1034">Appearance</td> <td data-bbox="1104 967 1485 1034">Amber coloured, clear to slightly opalescent gel forms in plates</td> </tr> </table>	Growth Promotion Test: 10-100 viable microorganisms⁸			Control strain	Incubation Conditions	Specifications	<i>S. cerevisiae</i> ATCC 9763	48-120 h at 22.5 ± 2.5°C	70%≤R%≤200%	<i>C. albicans</i> ATCC 10231	48-120 h at 22.5 ± 2.5°C	70%≤R%≤200%	<i>A. brasiliensis</i> ATCC 16404	48-120 h at 22.5 ± 2.5°C	70%≤R%≤200%	<i>E. coli</i> ATCC 8739	72-120 h at 22.5 ± 2.5°C	Inhibited	Sterility control		no growth	Appearance		Amber coloured, clear to slightly opalescent gel forms in plates
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BARCODE	Data matrix code is composed of 20 digits: Digits 1→2 Media code Digits 3→7 Batch number Digits 8→9 Sub-batch number Digits 10→14 Progressive number Digits 15→20 Expiry Date (DDMMYY)																								
GENERAL WARNING NOTES	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. Disposal of waste must be carried out according to national and local regulations in force.																								

⁸ For *E. coli* ≥100 viable microorganisms

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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)	Filling volume: 30ml Packaging: single wrapped (S.W.)	6 months

Customized filling volumes and formulations are available upon request

To receive information please

contact info@cpcbiotech.it