Technical Data Sheet

Yeast Glucose Chloramphenicol (YGC) Agar

Ordering number: 1.46348.0020

Yeast Glucose Chloramphenicol (YGC) Agar is suitable for the determination of the colony count of yeasts and molds in foodstuff.

Ten settle plates each with a diameter of 90 mm are single-bagged in transparent, hydrogen peroxide impermeable sleeves (non-irradiated). The sleeves consist of polypropylene with a barrier of PE-EVOH-PE.

The formulation of the basic medium conforms to the specifications of the § 35 LMBG (Lebensmittel- und Bedarfsgegenstandsgesetz, German Foodstuffs and Commodities Act) and DIN 10186.

Yeast Glucose Chloramphenicol (YGC) Agar is also available in 250 ml bottles with screw cap and a filling volume of 200 ml (article number 146465).

Mode of Action

Yeast extract provides the necessary carbon and nitrogen compounds, vitamins and trace elements for the growth of microorganisms. Glucose also serves as a carbon and energy source, the high concentration at the same time promotes the fungus growth and inhibits bacterial growth. Chloramphenicol inhibits the accompanying bacterial flora. The agar with a nearly neutral pH facilitates the growth of stressed yeast and molds.

Typical Composition

Yeast Extract	5 g/l
Glucose	20 g/l
Chloramphenicol	0.1 g/l
Agar	18 g/l

The appearance of the medium is clear and yellowish. The pH value is in the range of 6.4-6.8. The medium can be adjusted and/or supplemented according to the performance criteria required.

Application and Interpretation

Each plate is provided with a label including a data matrix code for paperless plate identification. The code consists of a two-dimensional 20-digit serial number, which harbors the following information:

digits 1-3: here code 208 (corresponds to article 146348); digits 4-9: lot number; digits 10-14:

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batch specific individual number; digits 15-20: expiration date (YY/MM/DD).

Please check each agar plate before using it on sterility and pay attention to aseptic handling in order to avoid false positive results.

The medium is incubated aerobically for 1-5 days, sometimes up to 4 weeks with a weekly read out, at 25 ± 1 °C.

The microscopic assessment (1:200- to 1:1000-fold magnification) is an important indication for the characterization of the cultivated yeasts and molds. The colonization forms (conidia, microconidia, sporangia, helical formations, spiked formations) are of essential importance for the characterization of the molds.

For the identification of yeasts and moulds the identification key of Deak and Beuchat (1996), compare Yarrow and Samson (1999), is recommended.

Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +2 °C to +8 °C.

Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control for Pharma

Control Strains	ATCC #	Inoculum CFU	Incubation	Expected Results
Candida albicans	10231	~100	4 d at 20-25 °C	good growth; whitish, dry colonies
Saccharomyces cerevisiae	9763	~100	4 d at 20-25 °C	good growth; whitish, blunt colonies
Aspergillus brasiliensis	16404	~100	4 d at 20-25 °C	good growth; bright mycelium; partially with black conidia
Penicillium pinophilum	DSM 1960	dense suspension	4 d at 20-25 °C	good growth; 2 - 3 cm; upper side: white mycelium; underside: yellowish with brown areas
Escherichia coli	8739	10,000-100,000	4 d at 20-25 °C	No growth

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Please refer to the actual batch related Certificate of Analysis.

Literature

Ajello, L. and Hay, R.J. (1999): Medical Mycology. In: Collier, L., Balows, A., Sussman, M. (Eds.) Topley & Wilson's Microbiology and Microbial Infections. Arnold, London Sydney Auckland, Vol.IV.

Beuchat, L.R. and Hocking, A.D. (1990): Some considerations when analyzing foods for thepresence of xerophlic fungi. J. Food Protect. **53**: 984-989.

Deak, T. and Beuchat, L. R. (1996): Yeasts in specific types of foods. Handbook of food spoilage yeasts. 61-96.

Yarrow, D. und Samson, R.A. (1999): Identifizierung von Hefen in Lebensmitteln. In Baumgart, J. (Ed.): Mikrobiologische Untersuchung von Lebensmitteln. Behr´s Verlag Hamburg, Kapitel V.

Ordering Information

Product	Cat. No.	Pack size
Yeast Glucose Chloramphenicol (YGC) Agar	1.46348.0020	20 x 90 mm plates
Yeast Glucose Chloramphenicol (YGC) Agar	1.46465.0006	6 x 200 ml bottles

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