Technical Data Sheet

Malt Extract Agar with Chloramphenicol

Ordering number: 1.46729.0020

For the enumeration of Yeast and Mould in foodstuff.

General

Malt Extract Agar with Chloramphenicol is a selective medium for the cultivation, detection, isolation and determination of germ counts of yeasts and molds while inhibiting Gram- positive and Gram-negative bacteria.

Mode of Action

The low pH of the medium promotes the growth of most yeasts and fungi, while bacterial growth is more or less strongly inhibited. Malt extract has a high content of carbohydrates (90-92 %), but also of nitrogen compounds and vitamins, e.g. riboflavin, pyridoxin, and thiamine. The soymeal peptone content, also rich in carbohydrates, additionally supplies the necessary protein compounds such as peptides and amino acids. This composition facilitates the good growth of yeasts, fungi, and dermatophytes. The addition of Chloramphenicol allows a more effective inhibition of bacterial growth whilst less inhibitory to sub lethally damaged Yeast and Moulds.

Typical Composition

Malt Extract	30 g/l
Soytone	3 g/l
Chloramphenicol	50 mg/l
Agar	16 g/l

The appearance of the medium is clear and yellowish. The pH value is in the range of 5.4 to 5.8. 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 185 (corresponds to article 146729); digits 4-9: lot number; digits 10-14: batch specific individual number; digits 15-20: expiration date (YY/MM/DD).

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

The culture medium is incubated aerobically for 3-4 days for yeasts and up to 7 days for moulds at 22 ± 2.5 °C.

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

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

Function	Incubation	Control Strains	Method of Control	Criteria and Growth Characteristics
Productivity	4days at 23±2 °C	Candida albicans ATCC® 2091 WDCM 00055	Quantitative	good growth; whitish, dry colonies
		Microsporum gypseum ATCC® 24102		good growth; white, cotton-wool-like mycelium
		Trichoderma longibrachiatum ATCC® 13631		good growth; slightly, white, very flat mycelium;growth across entire plate
		Penicillium pinophilum DSM 1960		good growth; 2-3 cm; upperside: white mycelium ; underside: central, orange-colored pigment, slightly yellowish outer border
Selectivity		Escherichia coli ATCC® 8739 WDCM 00012	Qualitative	no growth

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Literature

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Ordering Information

Product	Cat. No.	Pack size
Malt Extract Agar with Chloramphenicol	1.46729.0020	20 x 90 mm plates

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