

**Yeast extract dextrose chloramphenicol agar
(YGC agar)****Code 84604.0500****Also known as**

Chloramphenicol glucose yeast extract agar, CGYE agar

Intended use

For the selective isolation and enumeration of yeasts and moulds in milk and milk products.

Formula * - Composition in g/L

Yeast extract.....	5.0
D-Glucose.....	20.0
Chloramphenicol.....	0.1
Agar	15.0

* Adjusted and/or supplemented as required to meet performance criteria

Final pH 6.6 ± 0.2 at 25 °C.**Instructions for preparation**

Dissolve 40.1 g in 1 litre of purified water by bringing to the boil with frequent shaking. Sterilise in the autoclave at 121 °C for 15 minutes.

Principle of the method and general information

Yeast extract dextrose chloramphenicol agar (YGC agar) is recommended by International Dairy Federation for the enumeration of yeasts and moulds in milk and dairy products. Yeast extract and glucose stimulate the growth of yeasts and moulds, while chloramphenicol suppresses the contaminating bacteria.

Instruction for use

For laboratory use only.

Prepare the sample suspension and the decimal dilutions with Maximum Recovery Diluent (Art. N°84617.0500). Transfer by means of a sterile pipette 1 ml of the test sample if liquid, or 1 ml of the initial suspension in the case of other products, to each of two Petri dishes. Add to each plate 15 ml of medium cooled to 45°. Mix well the inoculum with melted agar and leave to solidify. Incubate at 25°C and enumerate the colonies after 3, 4, 5 days.

Limitations

- It is recommended that biochemical and/or serological tests be performed on colonies from pure culture for complete identification.
- Avoid prolonging boiling or autoclaving of the medium; will result in a soft medium.

Quality Control

Physical characteristics:

Appearance of powder

Appearance of prepared medium

pH (25°C)

Yellow, fine, homogeneous hygroscopic powder

Pale yellow, limpid

 6.6 ± 0.2

Microbiological characteristics:

Test strains	Incubation T° / t / At.	Inoculation method	Growth characteristics	Productivity Ratio
<i>C. albicans</i> ATCC 10231	25 °C / 3-5 days / AE	QT / 80-120 CFU	Growth with typical colonies	PR ≥ 0.7
<i>S. cerevisiae</i> ATCC 9763	25 °C / 3-5 days / AE	QT / 80-120 CFU	Growth with typical colonies	PR ≥ 0.7
<i>A. brasiliensis</i> ATCC 16604	25 °C / 3-5 days / AE	QT / 80-120 CFU	Growth with typical colonies	PR ≥ 0.7
<i>P. cyclopium</i> ATCC 16025	25 °C / 3-5 days / AE	QT / 80-120 CFU	Growth with typical colonies	PR ≥ 0.7
<i>E. coli</i> ATCC 25922	25 °C / 3-5 days / AE	MM / ≥10 ⁴ CFU	Growth inhibited	
<i>B. subtilis</i> ATCC 6633	25 °C / 3-5 days / AE	MM / ≥10 ⁴ CFU	Growth inhibited	

Notes

PR (Productivity Ratio): CFU obtained on the culture medium under test / CFU obtained on the Reference Batch

Incubation atmosphere AE: aerobic incubation

Inoculation method QT : quantitative surface plating method; MM: modified Miles-Misra surface drop method

ATCC is a registered trade mark of American Type Culture Collection

Reference

- International Dairy Federation (IDF), 2004, Standard Method ISO 6611/IDF 94

Storage conditions

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+10 °C to 30 °C and <60% RH).

Ordering information

84604.0500 Yeast extract dextrose chloramphenicol agar(YGC agar)

Bottle of 500 g