

**Product :  
CHLORAMPHENICOL GLUCOSE AGAR  
(CGA)**

**Also known as**

Yeast Extract-Glucose-Chloramphenicol Agar; YGC Agar; Yeast Extract-Dextrose-Chloramphenicol Agar; YDC Agar.

**Specification**

Solid and selective medium for the isolation and enumeration of yeasts and moulds in milk and dairy products, according to ISO standard 7954 and FIL-IDF 94B.

**Formula \* in g/L**

Dextrose.....	20.0
Yeast extract.....	5.0
Chloramphenicol.....	0.1
Agar .....	15.0

Final pH 6.6 ±0.2 at 25 °C

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

**Directions**

Suspend 40 g of powder in 1 L of distilled water and let it soak. Bring to the boil and distribute into containers. Sterilize in the autoclave at 121°C for 15 minutes.

**Description**

This medium is recommended by the Federation International Laitière-International Dairy Federation (FIL-IDF) for the isolation and enumeration of fungi (moulds and yeast) in milk and dairy products. This medium has also been adopted by the DIN and ISO standards.

This medium's selectivity is due to the bactericidal action of chloramphenicol which, due to its thermostable it, may be sterilized with the medium in the autoclave. Also due to the pH being neutral, the medium is able to be re-melted several times without affecting its stability, selectivity and efficacy. Re-melting and overheating may make the medium darker.

**Technique**

Generally a stab inoculation method or pour plate method is used to inoculate the medium. Incubation is at 25 ±1 °C for 5 days.

**Quality control**

**Incubation temperature:** 25°C ±1.0

**Incubation time:** 48 h-5 days

**Inoculum:** Practical range 100 ±20 CFU. Min. 50 CFU (productivity)/10<sup>3</sup>-10<sup>6</sup> CFU (selectivity), according to ISO 11133:2014. Spiral Plate Method.

Microorganism	Growth	Remarks
<i>Bacillus subtilis</i> ATCC® 6633	Inhibited	-
<i>Escherichia coli</i> ATCC® 25922	Inhibited	-
<i>Aspergillus niger</i> ATCC® 16404	Productivity > 0.50	Black sporulation at 5 days
<i>Candida albicans</i> ATCC® 10231	Productivity > 0.50	-
<i>Saccharomyces cerevisiae</i> ATCC® 9763	Productivity > 0.50	-

**References**

- DIN Standard 10186. Mikrobiologische Milch Untersuchung. Bestimmung der Anzahl von Hefen und Schimmelpilzen. Referenzverfahren.
- ISO 6611/ IDF 94 Standard (2004) Enumeration of yeast and moulds. Colony Count Technique at 25°C.
- ISO 7954 Standard (1987) General guidance for enumeration of yeast and moulds - Colony count at 25°C.
- ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

**Storage**

Keep tightly closed, away from light, in a dry place (4-30 °C).