

TECHNICAL DATA SHEET

Article No. 7533

YGC Agar (Yeast Extract Glucose Chloramphenicol Agar)

SYNONYMS

Yeast Extract Dextrose Chloramphenicol Agar, YDC Agar, Chloramphenicol Glucose Agar, CGA

SPECIFICATION

Solid and selective medium for the isolation and enumeration of yeast 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. Heat to boiling and distribute in suitable containers. Sterilize by autoclaving 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 DIN and ISO standards.

This medium's selectivity is due to the bactericidal action of chloramphenicol which, due to its thermostability, 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 efficiency. 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 ±1.0 °C
- Incubation time: 48 h/5 d
- Inoculum: Practical range 100 ±20 CFU. Min. 50 CFU (productivity)/10⁴-10⁶ CFU (selectivity), according to ISO 11133:2014/Amd 1:2018. Spiral Plate Method.

Microorganism	Growth	Remarks
<i>Bacillus subtilis</i> ATCC® 6633	Inhibited	None
<i>Escherichia coli</i> ATCC® 25922	Inhibited	None
<i>Aspergillus niger</i> ATCC® 16404	Productivity >0.50	5 d (black sporulation)
<i>Candida albicans</i> ATCC® 10231	Productivity >0.50	None
<i>Saccharomyces cerevisiae</i> ATCC® 9763	Productivity >0.50	None

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).

SHELF LIFE

5 years from date of production.

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