Condalab

Reference: 4679 **Technical Data Sheet**

Product: CHLORAMPHENICOL GLUCOSE AGAR

Specification

Solid and selective medium for the isolation and enumeration of fungi in milk and dairy products according to ISO 7954 and FIL-IDF 94B Standards.

Presentation

	Packaging Details	Shelf Life	Storage
10 Prepared bottle Bottle 125 ml with: 100 ± 3 ml	1 box with 10 bottles 125 ml. Non injectable cap	12 months	8-25°C

Composition

Composition (g/l):

Yeast extract.....5.0
D (+) Glucose.....20.0
Chloramphenicol.....0.1
Agar..... 15.0

Description /Technique

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:

Melt the medium contained in the bottles in a water bath or in a microwave oven, avoiding overhating, before pouring into Petri dishes when cooled to room temperature.

Once solidified on a flat surface, Spread the plates by streaking methodology or by spiral method.

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

After incubation, enumerate all the colonies that have appeared onto the surface of the agar.

Each laboratory must evaluate the results according to their specifications.

Quality control

Physical/Chemical control

Color : Straw-coloured yellow pH: 6.6 ± 0.2 at 25°C

Microbiological control

Spiral Spreading: Practical range 100±20 CFU; Min. 50 CFU (Productivity) / 10^4-10^6 CFU (Selectivity).

Aaerobiosis. Incubation at 25°C±1, reading at 24-48-72 h to 5 days.

Microorganism	Growth
Escherichia coli ATCC® 25922, WDCM 00013	Inhibited
Bacillus subtilis ATCC® 6633, WDCM 00003	Inhibited
Aspergillus niger ATCC® 16404	Good (≥ 50 %)
Candida albicans ATCC® 10231, WDCM 00054	Good (≥ 50 %)
S. cerevisiae ATCC® 9763, WDCM 00058	Good (≥ 50 %)

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH
Check at 7 days after incubation in same conditions

Bibliography

· DIN Standard 10186. Mikrobiologische Milch Untersuchung. Bestimmung der Anzahl von Hefen und Schimmelpilzen. Referenzverfahren.
· FIL-IDF 94B Standard (1991) 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/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.