Technical Data Sheet



# Product: Yeast-Glucose-Chloramphenicol Agar (YGC 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.

# Presentation20 Plates /IrradiatedPackaging DetailsShelf LifeStorage90 mm Plates1 box with cellophane bag with 10 plates/bag. Side3,5 months2-14 °Cwith: 21 ± 2 mllabeling.2-14 °C

### Composition

Composition (g/I):	
Dextrose	20.00
Yeast extract	5.00
Chloramphenicol	0.10
Agar	15.00

## **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:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Spread the plates by streaking method or by spiral method. This medium can be inoculated directly or after enrichment with broth. Incubation times greater then those mentioned above or different incubation temperatures may be required dpending on the sample, on the specifications,...

Place the plates upside down in the incubator, in aerobic conditions. Incubate the yeast and moulds for 48 h -5 days at 25 ±1°C. 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<sup>4</sup>-10<sup>6</sup> CFU (selectivity).

Microbiological control according to ISO 11133:2014/A1:2018.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

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

#### Microorganism

Aspergilus brasiliensis ATCC<sup>®</sup> 16404, WDCM 00053 Candida albicans ATCC<sup>®</sup> 10231, WDCM 00054 S. cerevisiae ATCC<sup>®</sup> 9763, WDCM 00058 Bacillus subtilis ATCC<sup>®</sup> 6633, WDCM 00003 Escherichia coli ATCC<sup>®</sup> 25922, WDCM 00013 Growth Good (≥70%) Good (≥70%) Good (≥70%) Inhibited Inhibited

#### Sterility Control

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



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# 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.

