

Technical Data Sheet

GranuCult® plus

SABOURAUD Agar with Chloramphenicol

Ordering number: 1.00918.0500

Sabouraud-4 % Dextrose Agar w. Chloramphenicol is designed for the determination of the total count of yeasts and molds.

The formulation of the basic medium (Sabouraud 4% Dextrose Agar) is prepared according to the recommendations of the harmonized methods of EP, USP, JP for Microbial Examination of Non-sterile Products: Microbial Enumeration Test and Tests for Specified Microorganisms.

Mode of Action

Sabouraud-4 % Dextrose Agar is a complex medium for cultivation and isolation of yeasts and molds as well as the absence test for *Candida albicans*. The high concentration of dextrose in addition with the low pH promotes the growth, the formation of spores (*Conidia* and *Sporangia*) as well as the formation of pigments of yeasts and molds. On the other side, growth of bacteria is inhibited. The addition of chloramphenicol will further inhibit the growth of the accompanying bacterial flora of heavily contaminated material, due to its wide spectrum.

Typical Composition (g/L)

100918 GranuCult® plus SABOURAUD Agar with Chloramphenicol	
Peptone from Casein	5.0
Peptone from Meat	7.5
D(+)-Glucose (Dextrose)	40.0
Chloramphenicol	0.05
Agar-agar*	15.0
Water	n.a.

* Agar-agar is equivalent to other different terms of agar.

Preparation

Suspend 65 g in 1 l of purified water. Heat in boiling water bath and agitate frequently until completely dissolved. Autoclave 15 min at 121 °C. Do not overheat.

Cool the medium to 45 - 50 °C in a water bath and pour plates.

The prepared medium is clear and yellowish-brownish.

pH: 5.6 ± 0.2 at 25 °C.

There should be no visible moisture on the plates before use. When moisture is present, the plates should be dried for the minimum time required to remove visible moisture.

Prepared plates can be stored in sealed plastic pouches or bags for up to 2 weeks at 2 – 8 °C and protected from light.

Experimental Procedure and Evaluation

The plates are inoculated with sample material according to the instructions. The fungi colonies which have grown are judged macro- and microscopically.

Incubation: up to 7 days at 28 °C aerobically, for *Candida albicans* and *Aspergillus brasiliensis* (formerly *A. niger*) up to 5 days at 30-35 °C

Storage

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +15 °C to +25 °C. After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 °C to +25 °C.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Control strains	Incubation	Expected Results
<i>Saccharomyces cerevisiae</i> ATCC 9763 [WDCM 00058]	3 days at 28°C, aerobic	Good to very good
<i>Aspergillus brasiliensis</i> (formerly <i>A. niger</i>) ATCC 16404 [WDCM00053]	3 days at 28 °C, aerobic	Good to very good
<i>Penicillium commune</i> ATCC 10428	3 days at 28 °C, aerobic	Poor to fair
<i>Escherichia coli</i> ATCC 25922 [WDCM 00013]	3 days at 28 °C, aerobic	None
<i>Lactobacillus casei</i> ATCC 393 [WDCM 00100]	3 days at 28 °C, aerobic	None

Please refer to the actual batch related Certificate of Analysis.



Candida albicans ATCC 2091

Literature

European Directorate for the Quality of Medicines and Healthcare. (2023): The European Pharmacopoeia. 11th Ed. Chapter 2.6.12 Microbiological examination of non-sterile products: Microbial enumeration tests and Chapter 2.6.13 Microbiological examination of non-sterile products: Test for specified products. Strasbourg, France.

Japanese Ministry of Health, Labour and Welfare. (2021): The Japanese Pharmacopoeia. 18th Ed. Chapter 4.05 Microbial Limit Test I. Microbiological examination of non-sterile products: Total viable aerobic count and II. Microbiological examination of non-sterile products: Test for specified products. Japanese Ministry of Health, Labour and Welfare. Tokyo, Japan.

Sabouraud R.J.A. (1892). Ann. Dermatol. Syphil. **3**: 1061.

Sabouraud R.J.A. (1910). Les Teignes. Masson, Paris.

United States Pharmacopeial Convention. (2022): The United States Pharmacopeia 41/National Formulation 36, <61> Microbiological examination of non-sterile products: Microbial enumeration tests and Chapter <62> Microbiological examination of non-sterile products: Test for specified products. Rockville, Md., USA.

Ordering Information

Product	Cat. No.	Pack size
GranuCult® plus SABOURAUD Agar with Chloramphenicol	1.00918.0500	500 g
Sabouraud Dextrose (4%) Agar (SDA) w. Chloramphenicol	1.46394.0006	6x 200 ml bottle

GranuCult, Merck, Millipore, and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. Detailed information on trademarks is available via publicly accessible resources.
© 2019 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck operates as
MilliporeSigma in the U.S. and Canada.

