

Orange Serum Biosart® 100 Nutrient Media



Introduction

Orange serum Biosart® 100 Nutrient Media is used for the detection and enumeration of acid-tolerant microorganisms. It is designed for cultivating these microorganisms in raw materials, water (general quality), waste water, wine, soft drinks, concentrates, fruit juice, foods and other products.

The medium contains essential nutrients and carbon sources. Due to the low pH value, acid-tolerant microorganisms are supported in their growth, while others are inhibited.

Technical Specifications

Order No.	16400-02----OS-K (50 units)
Media	Orange Serum
Color	Beige
Storage	Refrigerate (2 - 8 °C) after arrival*, dark and dry, use before expiry date on the label
Shelf Life	12 months
For Use With	Biosart® 100 Monitor (16402) with green membrane filter and dark green grid, 0.45 µm

* Data have shown constant performance in microbiological tests after storage at 22 °C for 14 days.

Media Formulation**

Ingredients	g/L
Peptone from casein	10
Yeast extract	3
Orange extract	5
Dextrose	4
Dipotassium phosphate	3
Water (AP-Quality)	Ad 1,000 mL

pH 5.5 ± 0.25 (at room temperature)

** Formula adjusted, standardized to suit performance parameters.

Instructions

The Biosart® 100 Monitor is a sterile, ready-to-use disposable unit featuring an integrated membrane filter and cellulose pad. After filtration, add the Biosart® 100 Nutrient Media from the ampoule and apply vacuum for 1 second. Remove the disposable unit from the manifold and seal the outlet. Finally, detach the funnel and close the lid to transform the monitor into a petri dish.

Incubation Conditions

3 - 5 days at 26 ± 2 °C, anaerobic for Lactobacilli.

Evaluation and Typical Results

Only acid-tolerant microorganisms can grow on this medium such as lactic acid bacteria (*Lactobacillus*, *Pediococcus* etc.), acetic acid bacteria, yeasts and molds.

Microbiological Quality Control

Sterility: Qualitative

Incubation conditions: 14 days at 30 - 35 °C

Specification: No growth or turbidity

Productivity: Quantitative

Inoculum: 50 - 150 CFU

Incubation conditions: 3 - 5 days at 26 ± 2 °C, anaerobic for Lactobacilli

Specification: ≥ 85% membrane filtration on control agar as reference

Microorganism	Test strain	Specification	Morphology
<i>Lactobacillus plantarum</i>	WDCM 00104	$P_R \geq 0.85$	Small white colonies
<i>Rhodotorula mucilaginosa</i>	DSM 70403	$P_R \geq 0.85$	Orange red colonies
<i>Leuconostoc mesenteroides</i> ***	DSM 20343	$P_R \geq 0.85$	Small white colonies
<i>Saccharomyces cerevisiae</i> ***	WDCM 00058	$P_R \geq 0.85$	Creamy white colonies
<i>Candida albicans</i> ***	WDCM 00054	$P_R \geq 0.85$	Creamy white colonies

*** Tested on a regular basis.

P_R Productivity Ratio

Selectivity: Qualitative

Inoculum: 10⁴ CFU

Specification: No growth | total inhibition

Microorganism	Test strain	Specification
<i>Bacillus cereus</i> ***	WDCM 00001	No growth total inhibition

*** Tested on a regular basis.

Specificity: Qualitative

Inoculum: 10³ CFU

TSA spread plate as control

Microorganism	Test strain	Specification Morphology
<i>Penicillium commune</i> ***	DSM 2211	Good growth, grey fluffy colonies

*** Tested on a regular basis.


The incubation conditions recommended by Sartorius can be adjusted based on the type of samples, in accordance with the reference standards or customer requirements. Descriptions of typical results illustrate the usual appearance of the specified microorganisms. However, in certain cases, the color and shape of the colonies may differ from the expected appearance. Additional tests may be required to confirm the results. Sartorius shall not be liable for any consequential or incidental damages incurred by customers from the use of its products.

Germany

Sartorius Lab Instruments GmbH & Co. KG
Otto-Brenner-Strasse 20
37079 Goettingen
Phone +49 551 308 0

USA

Sartorius Corporation
3874 Research Park Drive
Ann Arbor, MI 48108
Phone +1 734 769 1600

 For further contacts, visit
www.sartorius.com