SARTORIUS

Product Information

Total Count TTC Biosart® 100 Nutrient Media

Introduction

Total count medium with TTC is a meat extract-peptone medium for determining the total colony forming units (CFUs) count based on the "APHA (water)" and modified by the addition of TTC (2,3,5-Triphenyltetrazolium chloride). The culture medium is used for cultivating microorganisms in raw materials, water (general quality), waste water, beverages, beer, foods and other products.

The medium contains nutrients for the optimal growth of microorganisms, and the TTC indicator causes a maroon coloration of colonies by being cleaved into formazan (1,3,5-Triphenylformazan). This redox reaction, exhibited by most viable microorganisms, enhances their visibility on the membrane filter.

Technical Specifications

Order No.	16400-02----TZ-K (50 units)
Media	Total Count TTC (2,3,5-Triphenyltetrazolium chloride)
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	5
Dextrose	2
1 % TTC solution (2,3,5-Triphenyltetrazolium chloride)	10 mL
Water (AP-Quality)	Ad 1,000 mL

pH 7.1 ± 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

Up to 5 days at 30 - 35 °C.

Evaluation and Typical Results

Predominantly bacteria grow on this medium. The majority of their colonies are stained red by TTC reduction.

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: Up to 5 days at 30 - 35 °C
Specification: ≥ 85% membrane filtration on control agar as reference

Microorganism	Test strain	Specification	Morphology
Escherichia coli	WDCM 00012	$P_R \geq 0.85$	Red and shiny colonies
Enterococcus faecalis	WDCM 00087	$P_R \geq 0.85$	Small and red colonies
Bacillus subtilis	WDCM 00003	$P_R \geq 0.85$	Wrinkled, matt rose colonies
*Staphylococcus aureus***	WDCM 00032	$P_R \geq 0.85$	Orange red colonies
Tap water***	N/A	$P_R \geq 0.85$	Orange colonies

*** Tested on a regular basis.
P_R Productivity Ratio

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

Status: 11 | 2025