ALLIANCE BIO EXPERTISE

Reference: BPWR3068 **A.B.E. - Technical Data Sheet**

Product: **Slanetz and Bartley Agar**

Specification

Differential selective medium for the detection and enumeration of enterococci according to ISO Standard.

Presentation

	Packaging Details	Shelf Life	Storage
30 Membrane filtration plates 55 mm Plates for filtration purposes with: 9 ± 2 ml	1 box containing: 6 plastic bags with 5 plates of 55 mm/ bag.	6 months	2-25 ºC

Composition

Composition (g/l):

Tryptose	20.0
Yeast extract	5.00
D(+) Glucose	2.00
Dipotassium phosphate	4.00
Sodium azide	0.40
TTC	0.10
Agar	12.0

Description /Technique

Description

Differential medium for enumeration and differentiation of enterococci in water samples based on the resistance to sodium azide and the ability of enterococci to reduce the TTC to formazan and so their colonies are red in colour.
Note: The color tone (light amber / pale pink) between batches can vary without modifying the characteristics of the medium.

Technique

For the membrane filtration technique, take 100 mL of a well mixed water sample, and pass it through a sterile membrane filter. Then wash with 30 mL of sterile water to rinse the funnel of the filtering system.
Using sterile forceps, transfer the membrane aseptically to the culture medium contained in a Petri dish, making sure that the filter surface faces upwards. Close the lid and invert the plate. Incubate at 36 ± 2ºC for 44 ± 4 hours. The developed colonies that appear red or purple in colour must be considered as enterococci, since these bacteria reduce Triphenyltetrazolium-HCl to an insoluble formazan which is red in colour. The secondary or accompanying Gram negative bacteria are inhibited by sodium azide.
Note: the presence of enterococci must be confirmed with complementary biochemical tests (Catalase, Esculine, etc).

Quality control

Physical/Chemical control

Color : Light amber - pale pink pH: 7.2 ± 0.1 at 25ºC

Microbiological control

Membrane Filtration /Practical range 100 ± 20 CFU. min. 50 CFU (productivity)./10^4-10^6 CFU (selectivity)/ ≥10^3 CFU (specificity).

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

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

Aerobiosis. Incubation at 36 ± 2 ºC, reading at 44±4 h

Microorganism	Growth
Escherichia coli ATCC® 25922, WDCM 00013	Inhibited
Enterococcus faecalis ATCC® 19433, WDCM 00009	Good (≥ 50%) Colonies Red-brow
Enterococcus faecalis ATCC® 29212, WDCM 00087	Good (≥ 50%) Colonies Red-brow
Enterococcus faecium ATCC® 6057, WDCM 00177	Good (≥ 50%) Colonies Red-brow
Stph. aureus ATCC® 25923, WDCM 00034	Inhibited

Sterility control

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

Bibliography

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· LACHICA, LV.F. and P.A. HARTMAN (1968) Two improved media for isolating and enumerating enterococci in certain frozen foods. J. appl. Bact. 31:151-156.
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