

Specification

Liquid medium to verify the utilization of xylose in fastidious microorganisms, such as *Listeria spp.*, according to ISO 11290.

Presentation

20 Tubes
Tube 16 x 113 mm
with: 2 ± 0,1 ml

Packaging Details

16x113 mm glass tubes, ink labelled, metal-Non injectable cap. / 20 tubes per box.

Shelf Life

12 months

Storage

8-25°C

Composition

Composition (g/l):

Enzymatic digest animal tissues.....	10.00
Meat extract.....	1.00
Sodium chloride.....	5.00
D-Xylose.....	5.00
Bromocresol purple.....	0.02

Description /Technique

Highly nutritious liquid medium for utilization of sugars, described in ISO 11290-1, for fastidious microorganisms as *Listeria spp.* D- Xylose is included as carbohydrate.

Inoculated with colonies from pure cultures grown on a confirmative medium. Incubate at 37±1 ° C for 24-48h. Positive reactions (formation of acid from xylose) are manifested by turning purple to yellow, and this occurs mostly at 24 hours of incubation. The intensity of the yellow color is proportional to the amount of inoculum and acid produced.

Note: Positive reactions may occur at 5 days in macrovolumes tubes.

Each laboratory must evaluate the results according to current normatives.

Quality control

Physical/Chemical control

Color : Purple

pH: 6.8 ± 0.2 at 25°C

Microbiological control

Inoculate a pure culture

Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Aerobiosis. Incubation at 37 ± 1°C, reading after 24/44h to 5 days

Microorganism

L. monocytogenes ATCC® 13932, WDCM 00021

Listeria ivanovii ATCC® 19119

Listeria monocytogenes ATCC® 35152

Growth

D-Xilose (-). Medium does not change color.

D- Xylose (+). Medium Yellow.

D-Xilose (-). Medium does not change color.

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

Bibliography

- ATLAS, R.M. and L. C. PARKS (1993) Handbook of Microbiological Media. CRC Press Inc. Boca Ratón Fla. USA
- F.D.A. (1988) Bacteriological Analytical Manual. 8th Edition. Revision A. AOAC International. Gaithersburg. MD. USA
- HITCHINS, A.D. and K. JINNERMAN (2013) Detection and enumeration of *Listeria monocytogenes* in foods. In FDA BAM, Chapter 10.
- ISO 11133:2014/ Adm 1:2018./Adm1:2018 Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 11290-1 Standard (2017) Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria spp.* – Part 1: Detection method.
- ISO 11290-2 Standard (2017) Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria spp.* – Part 2: Enumeration method.