

## LISTERIA U.V.M. 2 BROTH

Enrichment broth for *Listeria* spp isolation in two stages according to USDA-FSIS procedures.

TYPICAL FORMULA	(g/l)
Proteose Peptone	2.5
Tryptone	7.5
Yeast Extract	5.0
Meat Extract	5.0
Sodium Chloride	20.0
Sodium Phosphate Bibasic	12.0
Potassium Phosphate Monobasic	1.35
Esculin	1.0
Nalidixic Acid	0.02
Acriflavine	0.025
Final pH 7.2 ± 0.2	

### DESCRIPTION

LISTERIA U.V.M. 2 BROTH is an enrichment medium used for *Listeria* spp isolation in two stages according to USDA-FSIS procedures.

### PRINCIPLE

Proteose peptone, tryptone and beef and meat extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Sodium chloride maintains the osmotic balance of the medium. Sodium and potassium phosphates act as buffer system. Esculin is a glycoside hydrolyzed by *Listeria* spp. Nalidixic acid blocks the DNA replication susceptible microorganisms and acts against many Gram-negative bacteria. Acriflavine inhibits many Gram-positive bacteria.

### TECHNIQUE

1. Add 225 ml of LISTERIA U.V.M. 1 BROTH to 25 g or 25 ml of sample. Homogenize for 2 minutes. Incubate at 35±2°C and observing after 18-48 hours. Spread 0.2 ml of the incubated broth onto *Listeria* selective agar plates following the appropriate methods.
2. After this is complete, transfer 0.1 ml of the incubated LISTERIA U.V.M. 1 BROTH to 9.9 ml of LISTERIA U.V.M. 2 BROTH. Incubate the secondary enrichment broth at 35±2°C and observing after 18-48 hours. Spread 0.2 ml of the secondary enrichment broth onto *Listeria* selective agar plates following the appropriate methods.

### INTERPRETATION OF RESULTS

Examine incubated *Listeria* selective agar plates for typical colonies and carry on with identification tests by means of standard biochemical method.

### STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

### WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

### DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

### REFERENCES

- Donnelly, C.W., and G.J. Baigent. (1986). Appl. Environ. Microbiol. **52** : 689-695.
- Lee, W.H., and D. McClain. (1989). Laboratory Communication N°57.(revised May 24, 1989). U.S.D.A., F.S.I.S. Microbiology division, Bethesda, MD.



**LIOFILCHEM® S.r.l.**

Via Scozia, Zona Ind.le - 64026, Roseto degli Abruzzi (TE) - ITALY  
Tel +39 0858930745 Fax +39 0858930330 Website: [www.liofilchem.net](http://www.liofilchem.net) E-mail: [liofilchem@liofilchem.net](mailto:liofilchem@liofilchem.net)

## PRODUCT SPECIFICATIONS

### NAME

LISTERIA U.V.M. 2 BROTH

### PRESENTATION

Glass bottles containing 225 ml of medium

### STORAGE

10-25°C

### PACKAGING

Ref.	Content	Packaging
461020	6 bottles x 225 ml	6 bottles in cardboard box

### pH OF THE MEDIUM

7.2 ± 0.2

### USE

LISTERIA U.V.M. 2 BROTH is an enrichment medium used for *Listeria* spp isolation in two stages according to USDA-FSIS procedures

### TECHNIQUE

Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM

Yellow-green medium

### SHELF LIFE

730 days

### QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control  
7 days at 22 ± 1°C, in aerobiosis  
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Inoculum for selectivity: 10<sup>4</sup>-10<sup>5</sup> UFC/ml  
Inoculum for specificity: ≤10<sup>4</sup> UFC/ml  
Incubation Conditions: 18-24 h at 36 ± 1°C

Microorganism		Growth
<i>Listeria monocytogenes</i>	ATCC® 19111	Good
<i>Listeria monocytogenes</i>	ATCC® 13932	Good
<i>Staphylococcus aureus</i>	ATCC® 25923	Inhibited

### TABLE OF SYMBOLS

 Batch code	 Fragile, handle with care	 Manufacturer	 Use by
 Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instructions for use



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