

Tryptone Soya Yeast Extract Broth

Liquid culture medium for the confirmation of *Listeria monocytogenes* according to ISO 11290.

TYPICAL FORMULA	(g/l)
Tryptone	17.0
Soya Peptone	3.0
Yeast Extract	6.0
Sodium Chloride	5.0
Dipotassium Phosphate	2.5
D-Glucose	2.5
Final pH 7.3 ± 0.2 at 25°C	

DESCRIPTION

Tryptone Soya Yeast Extract Broth (TSYEB) is a liquid medium used for the isolation and cultivation of *Listeria* spp in foods.

This medium complies with the recommendations given in ISO 11290, APHA and FDA for the detection and enumeration of *Listeria monocytogenes*.

PRINCIPLE

Tryptone and soya peptone provide nitrogen, vitamins, minerals and amino acids for organisms growth. Yeast extract is a source of vitamins, particularly of the B-group. Glucose is the fermentable carbohydrate providing carbon and energy. Dipotassium phosphate is the buffer. Sodium chloride supplies essential electrolytes for transport and osmotic balance.

PREPARATION

Suspend 36 g of powder in 1 liter of distilled water. Mix well and dissolve by heating with frequent agitation. Dispense into appropriate containers. Autoclave at 121°C for 15 minutes.

TECHNIQUE

Take an isolated colony obtained in TSYEA (ref. 610367) and suspend in a tube of TSYEB. Incubate at 25°C for 8-24 h until a cloudy medium is observed. Use a drop of this broth culture to examine for motility at the microscope.

A culture from TSYEB can be used for inoculating carbohydrate utilization broths and other test media. This culture may be kept at 4°C several days and used repeatedly as inoculum.

INTERPRETATION OF RESULTS

Refer to appropriate references and procedures for results.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store the prepared medium at 2-8°C away from light.

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 intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

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

REFERENCES

- EN ISO 11133:2014. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
- FDA, Bacteriological Analytical Manual (2005) 18th Ed., AOAC, Washington, DC. Taylor W. I., 1961, Appl. Microbiol., 9:487.
- Atlas R. M. (2004) 3rd Ed., Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton.
- ISO 11290-2:1998. Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* -- Part 2: Enumeration method.
- ISO 11290-1:1996. Microbiology of food and animal feeding stuff. Horizontal method for the detection and enumeration of *Listeria monocytogenes*. Part 1: Detection method. Amendment 1: Modification of the media and haemolysis test and inclusion of precision data.
- Vanderzant C. and Splittstoesser D. F., (Eds.) (1992) Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C.



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PRODUCT SPECIFICATIONS

NAME

Tryptone Soya Yeast Extract Broth

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGE

Ref.	Content	Packaging
610241	500 g	500 g of powder in plastic bottle
620241	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

7.3 ± 0.2

USE

Tryptone Soya Yeast Extract Broth (TSYEB) is a liquid medium used for the isolation and cultivation of *Listeria monocytogenes* in food and foodstuffs, according to ISO 11290, APHA and FDA

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous

Colour: beige

Prepared medium

Appearance: slightly opalescent

Colour: amber

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: ≤100 CFU
Incubation conditions: 18-24 h at 25 ± 1°C










Microorganism

Listeria monocytogenes 4b WDCM 00021
Listeria monocytogenes 1/2a WDCM 00109

Growth

Good
Good

TABLE OF SYMBOLS

 LOT	Batch code	 Keep away from heat sources	 Manufacturer	 Use by	 Fragile, handle with care
 REF	Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Consult instruction for use	



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