

## TSYEB BROTH (TRYPTONE SOY YEAST EXTRACT BROTH) ISO 11290-1

CAT N°: 1339

For the confirmation of *Listeria monocytogenes*

### FORMULA IN g/l

Casein Peptone	17.00	Soy Peptone	3.00
Yeast Extract	6.00	Dipotassium Phosphate	2.50
Sodium Chloride	5.00	D-Glucose	2.50

Final pH 7.3 ± 0.2 at 25°C

### PREPARATION

Suspend 36 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

### USES

TSYEB BROTH ISO 11290-1 (Tryptone Soy Yeast Extract Broth) is a general purpose medium that supports the growth of a wide variety of microorganisms. This medium is formulated according to ISO 11290-1 and is used for the confirmation of *Listeria monocytogenes* colonies and for subcultivation of suspected *Listeria* colonies.

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

To test the use of carbohydrates, inoculate all carbohydrate broths from one culture of TSYEB.

Inoculate and incubate at 35 ± 2°C during 18-48 hours.

### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35 ± 2°C and observed after 18-48 hours

Microorganisms	Growth
<i>Escherichia coli</i> ATCC 25922	Good
<i>Staphylococcus aureus</i> ATCC 6538	Good
<i>Listeria monocytogenes</i> ATCC19117	Good

According ISO 11133 24h/25°C

Microorganisms	Inoculum (cfu/ml)	Productivity Qualitative
<i>L. monocytogenes</i> ATCC 19111	10 <sup>3</sup> -10 <sup>4</sup>	Turbidity (2)

## BIBLIOGRAPHY

UNE-EN-ISO 11290-1 Microbiology of food and animal feeding stuff. Horizontal method for the detection and enumeration of *Listeria monocytogenes*. Part. 1: Detection method. Ammendment 1: Modification of the isolation media and the haemolysis test and inclusion of precision data.



Once opened keep powdered medium closed to avoid hydration.

