TSYEA AGAR (TRYPTONE SOY YEAST EXTRACT AGAR) ISO 11290-1

CAT Nº: 1398

For the confirmation of *Listeria spp*

FORMULA IN g/l

Tryptone	17.0	Dipotassium Phosphate	2.5
Yeast Extract	6.0	Glucose Monohydrate	2.5
Sodium Chloride	5.0	Bacteriological Agar	15.0
Soy Peptone	3.0		

Final pH 7.3 ± 0.2 at 25ºC

PREPARATION

Suspend 51 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. Sterilize in autoclave at 121ºC for 15 minutes. Cool to 45-50ºC, mix well and dispense into plates. The prepared medium should be stored at 8-15°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

TSYE AGAR (Tryptone Soy Yeast Extract) ISO 11290-1 is a general purpose medium which supports the growth of a wide variety of microorganisms.

The formula conforms to ISO 11290-1 and is used for the confirmation of *Listeria monocytogenes* colonies and to subculture suspected *Listeria* colonies.

Tryptone, Yeast extract and Soy peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Glucose is the fermentable carbohydrate providing carbon and energy. Dipotassium phosphate acts as a buffer system. Bacteriological agar is the solidifying agent.

This medium is used to select colonies for the confirmation of *Listeria spp.* After incubation in Listeria Oxford Agar (cat.1133) and Listeria Palcam Agar(cat.1141) , take 5 suspected *Listeria spp* colonies, and inoculate them in TSYEA Agar.

Incubate at 35-37ºC during 18-24 hours or until growth is satisfactory. The rest of confirmatory tests should be carried out from pure cultures in TSYEA Agar.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35– 37º C and observed after 18-24 hours.

Microorganisms	Growth
Listeria monocytogenes ATCC 19111	Good
Listeria innocua ATCC 33090	Good

According ISO 11133 24h/37°C

Microorganisms	Inoculum (cfu/ml)	Productivit Qualitative
Listeria monocytogenes ATCC 13932	10^3-10^4	good growth

BIBLIOGRAPHY

ISO 11290-1.Horizontal method for the detection and enumeration of *Listeria monocytogenes* Part 1: Detection Method

ISO

STORAGE

Once opened keep powdered medium closed to avoid hydration.