

## Tryptone Soy Yeast Extract Agar, TSYEA (i23668)

TSYEA is recommended for conformation of *Listeria*. Recommended by ISO Committee under the specification ISO 10560:1993.

Industry: Food

### Principles & Uses

TSYE Agar, formulated for the isolation and cultivation of *Listeria monocytogenes*, is a versatile medium supporting the growth of various microorganisms. Complying with ISO standards, it employs peptone, yeast extract, and papaic digest of soybean meal to provide essential nutrients like nitrogen, vitamins, minerals, and amino acids. Dextrose serves as the fermentable carbohydrate for energy, while dipotassium hydrogen phosphate acts as a buffer.

In food safety procedures, TSYE Agar plays a crucial role in confirming *Listeria monocytogenes*, ensuring the purity of dairy products. Its formulation adheres to recognized standards, making it a reliable choice in microbiological applications.

### Composition (gr/L)

Casein Enzymatic Hydrolysate 17 g, Papaic Digest of Soybean Meal 3 g, Yeast Extract 6 g, Dextrose 2.5 g, Sodium Chloride 5 g, Dipotassium Hydrogen Phosphate 2.5 g, Agar 15 g.

Final pH at 25°C 7.3 ± 0.2

### Preparation from dehydrated Powder

Suspend 51 g of the powder in 1 L of distilled water. Autoclave at 121°C for 15 minutes.

### Quality Control

Dehydrated Appearance: Cream to yellow, homogeneous, free flowing.

Prepared Appearance: Yellow, Clear to slightly Opalescent.

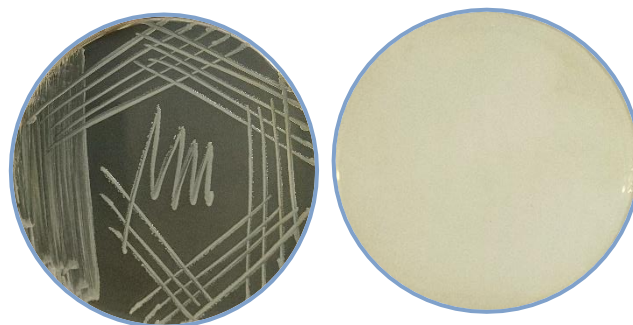
Reaction of 5.1% Solution at 25°C: pH 7.3 ± 0.2

### Cultural Response

Cultural response was observed after incubation at 30 - 37 °C for 24 – 48 hours.

Organism (ATCC*)	Recovery
<i>Listeria monocytogenes</i> (19111)	good
<i>Listeria monocytogenes</i> (19118)	good

\*ATCC is a registered trade mark of the American Type Culture Collection.



*Listeria monocytogenes* (left). Prepared Culture Media (right). The background of cultured plate has been darkened for better visibility of colonies.

### Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.