

Technical Information

Saline Nutrient Agar

Product Code: DM 2776

Application: - Saline Nutrient Agar is recommended for the cultivation of *Vibrio parahaemolyticus* from food products or animal feeding products.

Composition**

Ingredients	Gms / Litre
Peptone	5.000
Meat extract	3.000
Sodium chloride	30.000
Agar	15.000
pH after sterilization (at 25°C)	8.50±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Saline Nutrient Agar is recommended by ISO 8914:1990 (1) for isolating and enumerating *Vibrio parahaemolyticus* from food and animal feed.

Vibrio parahaemolyticus is a halophilic estuarine organism. This organism can be isolated from a variety of sea food product and marine environments. The organism, when isolated from fresh sea food, is usually found in low number and is sensitive to refrigeration and heat.

Peptone and meat extract supply nitrogen compounds, growth factors and vitamins for the growth of *Vibrio parahaemolyticus*. High sodium chloride content and alkaline pH of the medium supplies conditions that facilitate easy growth of *Vibrio parahaemolyticus*, while restricting the growth of most gram-negative microorganisms.

For isolation and confirmation of *Vibrio parahaemolyticus*, five typical colonies from Thiosulfate Citrate Bile Sucrose Agar (TCBS) or Triphenyltetrazolium Chloride Soya Tryptone Agar (TSAT) are subculture onto Saline Nutrient Agar followed by biochemical confirmation.

Methodology

Suspend 53.0 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Shake well before pour in sterile Petri plates.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

Light yellow coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 5.3% w/v aqueous solution after sterilization at 25°C. pH : 8.5 ±0.2



Dehydrated Culture Media
Bases / Media Supplements

pH Range

8.30 - 8.70

Cultural Response

DM2776: Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours.

Organism	Inoculum (CFU)	Growth	Recovery
<i>Vibrio parahaemolyticus</i> ATCC 17802	50-100	good-luxuriant	>=70%
<i>Vibrio cholerae</i> ATCC 15748	50-100	good-luxuriant	>=70%
<i>Escherichia coli</i> ATCC 25922	50-100	good-luxuriant	>=70%
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	good-luxuriant	>=70%

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and prepared medium at 2-8°C. Use before expiry date on the label.

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Indian Standard, Microbiology- General Guidance for the Detection of *Vibrio parahaemolyticus*. ISO 8914:1990.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
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