

## TM 2406 – TWEEN ESTERASE TEST AGAR BASE (ISO 10273:2017)

### INTENDED USE

Recommended for confirmation of *Yersinia enterocolitica*.

### PRODUCT SUMMARY AND EXPLANATION

*Yersinia* is a genus of the family Enterobacteriaceae and are defined as rod-shaped to coccobacilli, Gram-negative bacteria. Tween Esterase Test Agar Base is recommended for differentiation of *Yersinia* spp. by the ISO Committee for identification of *Yersinia* species. The method is applicable to products intended for human consumption or for the feeding animals, and to environmental samples in the area of food production and food handling. Yersiniosis caused by *Y. enterocolitica* and *Y. pseudotuberculosis* are characterized by acute diarrhea and fever. Transmission occurs via the oral-fecal route by contaminated water and foods, or by infected individuals or animals. Hospital transmission as well as through blood transfusion has also been reported *Y. enterocolitica* is a psychrotrophic bacteria and multiplies in cold-stored foods.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Sodium chloride	5.000
Calcium chloride	0.100
Agar	15.000

### PRINCIPLE

Peptone provide nitrogenous and carbonaceous compounds, vitamin B complex, trace elements and other essential growth nutrients. Sodium chloride maintains the osmotic equilibrium.

### INSTRUCTION FOR USE

- Dissolve 30.01 grams in 1000 ml purified / distilled water containing 10ml of Tween 80.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 30 minutes.
- Mix well and distribute in tubes and allow the tubes to set in sloped form with a long slants and a minimal butt.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured opalescent gel forms in tubes as slants.
pH (at 25°C)	: 7.4±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Tween esterase test	Incubation Temperature	Incubation Period



<i>Yersinia enterocolitica</i>	27729	50-100	Good-luxuriant	Variable	26-27°C	5 Days
<i>Yersinia intermedia</i>	29909	50-100	Good-luxuriant	Opaque zone of precipitate	26-27°C	5 Days

**PACKAGING:**

In pack size of 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

- 2 nd Edition Bergy's Manual of Systematic Bacteriology(Bottone et al.,2005)
- FDA/CFSAN (ed.)(2009)Foodborne Pathogenic Microorganisms and Natural Toxins Handbook "Bad Bug Book".College Park,Food and Drug Administration,Center for Food Safety & Applied Nutrition.
- International Organization for Standardization (ISO), 2003 Draft ISO/DIS 10273.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**