

# TMV 1004 – LACTOBACILLUS SELECTION BROTH BASE (VEG.)

#### **INTENDED USE**

For selective isolation and enumeration of Lactobacilli from foods.

## PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using Veg hydrolysate in place of Casein enzymic hydrolysate which make the medium free of BSE/TSE risks. Lactobacillus Selection Broth Base (Veg) may be used for isolation and cultivation of Lactobacilli. These media are the modifications of the media developed by Rogosa et al as a selective media for isolation and enumeration of Lactobacilli from oral, faecal specimens, food and dairy products.

#### **COMPOSITION**

Ingredients	Gms / Ltr	
Veg hydrolysate	10.000	
Yeast extract	5.000	
Dextrose	20.000	
Sodium acetate	25.000	
Monopotassium hydrogen phosphate	6.000	
Ammonium citrate	2.000	
Polysorbate 80	1.000	
Magnesium sulphate	0.575	
Manganese sulphate	0.120	
Ferrous sulphate	0.034	

## **PRINCIPLE**

This medium consists of Veg hydrolysate, yeast extract and dextrose which are the nitrogen and carbon sources. Polysorbate 80 provides fatty acids required for the metabolism of Lactobacilli. Ammonium citrate and sodium acetate inhibit many organisms, including Streptococci, moulds and also restrict swarming. Addition of acetic acid lowers the pH which is inhibitory to many microorganisms but favours the growth of Lactobacilli on the agar medium. Lactobacilli appear as large, white colonies.

# **INSTRUCTION FOR USE**

- Dissolve 69.7 grams in 1000 ml purified/distilled water containing 1.32 ml glacial acetic acid. Heat with frequent stirring.
- Heat to boiling for 1-2 minutes to dissolve the medium completely.DO NOT AUTOCLAVE.
- If storage is necessary, autoclave at 12 psi pressure for 15 minutes.

## **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing

powder.

**Appearance of prepared medium** : Yellow coloured clear to slightly opalescent solution in tubes.

**pH (at 25°C)** : 5.5 ± 0.2











## **INTERPRETATION**

Cultural characteristics observed in presence of 3-5% Carbon dioxide (CO<sub>2</sub>) after incubation.

Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	>=10 <sup>3</sup>	Inhibited	35-37°C	48 Hours
Lactobacillus acidophilus	4356	50-100	Luxuriant	35-37°C	48 Hours
Lactobacillus casei	9595	50-100	Luxuriant	35-37°C	48 Hours
Lactobacillus plantarum	8014	50-100	Luxuriant	35-37°C	48 Hours
Proteus vulgaris	13315	>=10³	Inhibited	35-37°C	48 Hours

# **PACKAGING:**

In pack size of 500 gm bottles.

#### **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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**

- 1. Rogosa, Mitchell and Wiseman, 1951, J. Bacteriol., 62:132.
- 2. Rogosa, Mitchell and Wiseman, 1951, J. Dental Res., 30:682.
- 3. Ellis and Sarles, 1958, J. Bacteriol., 75:272.
- 4. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
- 5. Standard Methods for the Examination of Dairy Products, 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.





































**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only

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