

## TMV 486 – WL - NUTRIENT BROTH (VEG.)

### INTENDED USE

For cultivation of yeasts, molds and bacteria encountered in breweries and industrial fermentations.

### PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using Veg hydrolysate instead of casein enzymic hydrolysate which makes the media free of BSE/TSE risks. WL (Wallerstein Laboratory) Veg Media are the modifications of WL (Wallerstein Laboratory) media which are formulated as described by Green and Gray for the examination of materials encountered in brewing and in industrial fermentations with mixed flora of yeasts and bacteria. At pH 5.5, viable baker's yeast can be enumerated and at pH 6.5 count of baker's yeast as well as distiller's yeast can be enumerated.

### COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	5.000
Yeast extract	4.000
Dextrose	50.000
Monopotassium phosphate	0.550
Potassium chloride	0.425
Calcium chloride	0.125
Magnesium sulphate	0.125
Ferric chloride	0.0025
Manganese sulphate	0.0025
Bromo cresol green	0.022

### PRINCIPLE

The medium consists of Yeast extract, veg hydrolysate, dextrose in the media which provide growth requirements for microorganisms. Monopotassium phosphate buffers the media. Potassium chloride, calcium chloride and ferric chloride are essential ions that help to maintain the osmotic balance. Magnesium sulphate and manganese sulphate are the sources of divalent cations. Bromo cresol green is the pH indicator.

### INSTRUCTION FOR USE

- Dissolve 60.25 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121° C) for 15 minutes. If desired, to obtain a pH of 6.5, add 1% solution of sodium bicarbonate.

### QUALITY CONTROL SPECIFICATIONS



**Appearance of Powder** : Greenish yellow coloured, homogeneous, free flowing powder.  
**Appearance of prepared medium** : Bluish green coloured, clear solution in tubes.  
**pH (at 25°C)** : 5.5 ± 0.2

## INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Fair to good	35°C	48 Hours
<i>Lactobacillus fermentum</i>	9338	50-100	Fair to good	35°C	48 Hours
<i>Proteus mirabilis</i>	25933	50-100	Fair to good	35°C	48 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Good-luxuriant	35°C	48 Hours
<i>Saccharomyces uvarum</i>	9080	10-100	Good-luxuriant	35°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 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

1. Green and Gray, 1950, Wallerstein Lab. Commun., 13:357.



**GMP**  
 Good Manufacturing  
 Practices Certified

  
 Best Before

**QTY.**  
 Quantity

**REF**  
 Catalogue Number

  
 Manufacturer

  
 Temperature Unit

**LOT/  
 B. NO.**  
 Lot / Batch Number

  
 Consults Instructions  
 for Use

  
 QR  
 Code

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

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