

TMV 485 – WL - DIFFERENTIAL BROTH (VEG.)

INTENDED USE

For selective isolation and enumeration of 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	
Actidione (Cycloheximide)	0.004	

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. Actidione (Cycloheximide) suppresses growth of yeast and moulds in brewing samples, permitting the detection and enumeration of bacteria that may be present in small numbers.

INSTRUCTION FOR USE

- Dissolve 60.26 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.

Warning: Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation.













QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Greenish yellow coloured, homogeneous, free flowing powder.

: Bluish green coloured, clear solution in tubes. Appearance of prepared medium

pH (at 25°C) : 5.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	35°C	48 Hours
Lactobacillus fermentum	9338	50-100	Luxuriant	35°C	48 Hours
Proteus mirabilis	25933	50-100	Luxuriant	35°C	48 Hours
Saccharomyces cerevisiae	9763	>10 ³	Inhibited	35°C	48 Hours
Saccharomyces uvarum	9080	>10³	Inhibited	35°C	48 Hours

PACKAGING:

In pack size of 100 gm and 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





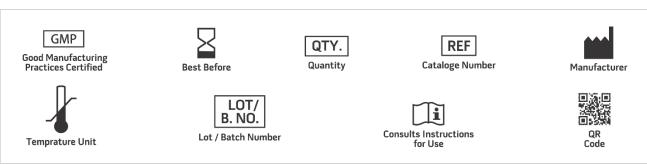








1. Green and Gray, 1950, Wallerstein Lab. Commun., 13:357.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only **Revision: 08 Nov., 2019**







