

TMV 565 – WL - DIFFERENTIAL AGAR (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
Agar	20.000

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 80.26 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.
Appearance of prepared medium : Bluish green coloured, very slightly opalescent gel forms in petri plates.
pH (at 25°C) : 5.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	≥70%	35°C	48 Hours
<i>Lactobacillus fermentum</i>	9338	50-100	Luxuriant	≥70%	35°C	48 Hours
<i>Proteus mirabilis</i>	25933	50-100	Luxuriant	≥70%	35°C	48 Hours
<i>Saccharomyces cerevisiae</i>	9763	>10 ³	Inhibited	0%	35°C	48 Hours
<i>Saccharomyces uvarum</i>	9080	>10 ³	Inhibited	0%	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.

 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