

TMV 1628 - UNIVERSAL BEER AGAR (UB AGAR) (VEG.)

INTENDED USE

For culturing microorganisms having significance in brewing industry.

PRODUCT SUMMARY AND EXPLANATION

Universal Beer Veg Agar is prepared by replacing Peptonized milk by Veg Hydrolysate No.3 which is free from BSE/TSE risks. This medium is the modification of Universal Beer Agar which is designed according to the formula developed by Kozulis and Page for culturing microorganisms which are significant in the brewing industry. Beer is added to the medium to stimulate the growth of beer spoilage organisms, thereby increasing the selectivity of the medium. Beer contains hop constituents and ethyl alcohol which eliminates many airborne contaminants and thus help in minimizing false positive results. Universal Beer Veg Agar supports growth of *Lactobacillus*, *Pediococcus*, *Acetobacter* and yeast strains which may be found contaminating the wort and beer.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate No. 3	15.000
Yeast extract	6.100
Dextrose	16.100
Tomato juice	12.200
Dipotassium phosphate	0.310
Monopotassium phosphate	0.310
Magnesium sulphate	0.120
Sodium chloride	0.006
Ferrous sulphate	0.006
Manganese sulphate	0.006
Agar	12.000

PRINCIPLE

Veg hydrolysate No.3, yeast extract, dextrose and salts provide all essential growth nutrients. Tomato juice gives acidic environment and is also a source of carbon, protein. Phosphate provides the buffering system to the medium. Magnesium sulfate, ferrous sulphate and manganese sulphate are the sources of ions that stimulate metabolism. The organisms which survive or grow in wort and beer during beer manufacturing can be recovered due to this particular composition of the medium.

INSTRUCTION FOR USE

- Dissolve 62.15 grams in 750 ml of distilled water.
- Heat to boiling to dissolve the medium completely. Add 250 ml beer, without degassing, to the hot medium and mix gently.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 10 minutes.
- If required, add 1 mcg/ml of Cycloheximide to sterile medium prior to dispensing.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Appearance of prepared medium pH (at 25°C) : Medium amber coloured clear to slightly opalescent gel forms in Petri plates.
: 6.3±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Acinetobacter calcoaceticus</i>	23055	50-100	Good-luxuriant	≥70%	35°C	40-48 Hours
<i>Lactobacillus acidophilus</i>	4356	50-100	Good-luxuriant	≥70%	35°C	40-48 Hours
<i>Lactobacillus fermentum</i>	9338	50-100	Good-luxuriant	≥70%	35°C	40-48 Hours
<i>Proteus vulgaris</i>	13315	50-100	Fair-good	20-30 %	35°C	40-48 Hours

PACKAGING:

In pack size of 100 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. Kozulis J.A. and Page H.E., 1968, Proc. Am. Soc. Brew. Chem., 52:58.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.



 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**
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