CM 20577 – DEY-ENGLEY NEUTRALIZING AGAR (D/E AGAR DISINFECTANT TESTING) (VEG.)

INTENDED USE

For disinfectant testing, where neutralization agent is important for determining its bactericidal activity.

PRODUCT SUMMARY AND EXPLANATION

Dey-Engley Neutralizing VegAgar is prepared byusing Veg hydrolysate in place of Casein enzymic hydrolysate which is free from BSE/TSE risks. Dey-Engley Neutralizing Agar (Veg) is modification of the medium formulated as per the procedure described by Engley and Dey. A strongly bacteriostatic substance inhibits the growth and reproduction of bacteria without killing them. These bacteria hold the ability to cause infection under favourable conditions. Dey-Engley Neutralizing Agar neutralizes a broad spectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorine preparations, mercurials, formaldehyde and glutaraldehyde.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	5.000
Yeast extract	2.500
Dextrose	10.000
Sodium thiosulphate	6.000
Sodium thioglycollate	1.000
Sodium bisulphite	2.500
Lecithin	7.000
Polysorbate 80	5.000
Bromocresol purple	0.020
Agar	15.000

PRINCIPLE

Themedium consists of Veg hydrolysate which provide source of nitrogen, carbon, long chain amino acids and other essential nutrients, dextrose acts as the energy source and yeast extract provides vitamin B-complex. The present formulation incorporates neutralizing substances for almost all the active substances that are used as antiseptics and disinfectants. Sodium bisulfite neutralizes aldehydes; sodium thioglycollate neutralizes mercurials; sodium thiosulfate neutralizes iodine and chlorine; lecithin neutralizes quaternary ammonium compounds; and polysorbate 80 neutralizes substituted phenolics. Bromocresol purple has been used as the indicator for dextrose utilization. Due to the high concentration of lecithin in the broth medium, turbidity cannot be used to detect growth. Therefore, bromocresol purple and dextrose are added to the medium that will detect dextrose fermenting organisms, if positive, will change the colour of the medium from purple to yellow.

INSTRUCTION FOR USE

Dissolve 54.0gramsin1000 ml purified/distilled water.
Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to bluish grey homogeneous free flowing powder.
Appearance of prepared medium	: Purple red coloured opalescent gel (may have particulate precipitate) forms in Petri plates.
pH (at 25°C)	: 7.6 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37 °C	40-48 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37 °C	40-48 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	>=70%	35-37 °C	40-48 Hours
Staphylococcus. aureus	25923	50-100	Luxuriant	>=70%	35-37 °C	40-48 Hours
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	35-37 °C	40-48 Hours

PACKAGING:

Inpacksizeof500 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

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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3. Downes, F. P, and K Ito. 2001. APHA FOOD. Compendium of Methods for the Microbiological Examination of Foods 4 ed. Washington, D.C.
4. Erlandson, A. L, and C. A Lawrence. 1953. Science 118.
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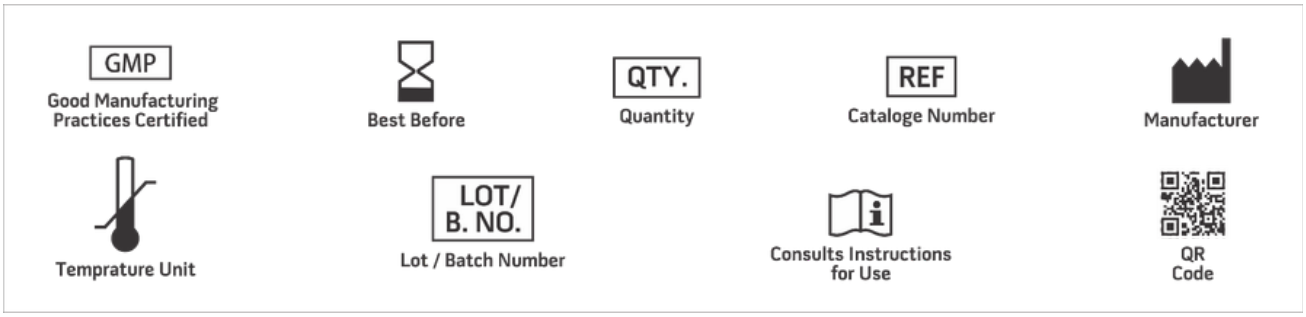

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only