

## **CM 20149 – ANTIBIOTIC ASSAY MEDIUM NO. 8 (BASE AGAR W/ LOW pH) (VEG.)**

### INTENDED USE

For microbiological assay of Mitomycin, Plicamycin and Vancomycin.

### PRODUCT SUMMARY AND EXPLANATION

AntibioticVegAssay Medium No. 8 is prepared incorporating vegetable peptones in place of animal peptones, making the medium BSE, TSE risks free. This medium can be used for the same purpose of Antibiotic Assay Medium No. 8, for the assay of various antibiotics. Grove and Randall have elaborately elucidated the methods to perform these assays and various media used for the same. Schmidt and Moyer have reported the use of antibiotic assay medium for the liquid formulation used in the performance of antibiotic assay. These media are also recommended by USP and FDA. Similarly, Antibiotic Veg Assay Medium No. 8, used especially to prepare the base layer to assay Tetracyclines and other antibiotics. It provides a solidified substratum for growth of organisms. The medium has an optimal pH of 5.9 for assay of Tetracycline as these antibiotics are stable at slightly lower pH. This pH condition also supports the growth of test organisms. Antibiotic Veg Assay Medium No. 8 is also used as base and seed agar medium for agar diffusion assay for Mitomycin, Mithramycin, Plicamycin and Vancomycin

### COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	6.000
Yeast extract	3.000
Veg extract	1.500
Agar	15.000

### PRINCIPLE

The medium contains Veg extract, Yeast extract and Veg Peptone serves as a source of nutrients and growth factors.

### INSTRUCTION FOR USE

Dissolve 25.5grams in 1000 ml purified / distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Advice: Recommended for the microbiological assay of Oxytetracycline, Tetracycline and Vancomycin.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured opalescent gel forms in Petri plates.
pH (at 25°C)	: 5.9±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	Mitomycin, Vancomycin	35-37°C	18-24 Hours
Bacillus cereus var mycoides	11778	50-100	Luxuriant	>=70%	Oxytetracycline, Tetracycline	35-37°C	18-24 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.

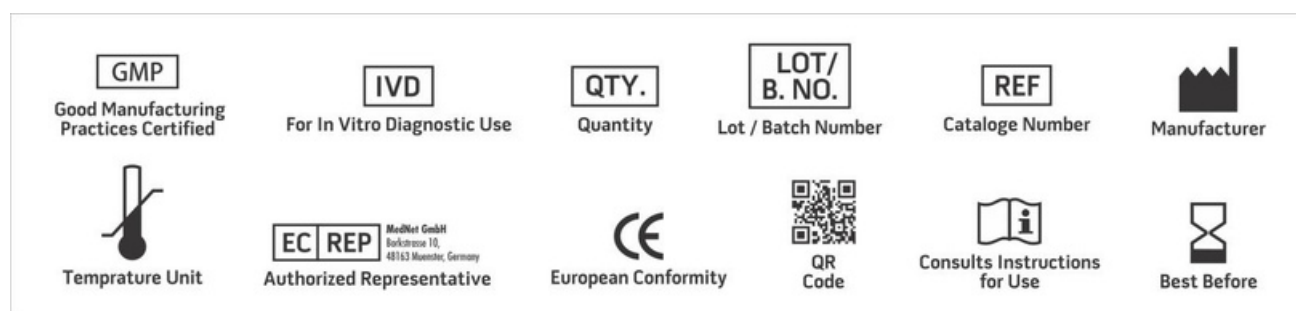
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.
2. Schmidt and Moyer, 1944, J. Bact., 47:199.
3. United States Pharmacopoeia 2011, USP 34/NF 29, US Pharmacopoeial Convention, Inc., Rockville, MD.
4. Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983 Title 21, Part 436, Subpart ,,D, Washington, D.C.: U.S. Government Printing Office, paragraphs 436, 100-436, 106, p. 242-259, (April 1).
5. Chapin-Robertson and Edberg, 1991, Antibiotics in Laboratory medicine, New York pp 311.



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

\*For Lab Use Only

