CM 20151 – ANTIBIOTIC ASSAY MEDIUM NO. 9 (POLYMYXIN BASE AGAR (VEG.)

INTENDED USE

For as saying the products containing Polymyxin-B.

PRODUCT SUMMARY AND EXPLANATION

Antibiotic Veg Assay Medium No.9(Polymyxin Veg Base Agar) is prepared by incorporating vegetable peptones in place of animal peptones, making the medium BSE, TSE risks free. This can be used for the same purpose of Antibiotic Assay Medium No.9 (Polymyxin Base Agar) widely recommended for assay of Polymyxin B, Colistimethate sodium and Colistin using Bordetella bronchiseptica as test organism. Carbenicillin assay is also performed using this medium with Pseudomonas aeruginosa. The medium is numerically identical with the name assigned by Groove and Randall. Higher agar concentration provides control over the diffusion activity of polymixin B antibiotics and provides solid substratum to support the seed agar layer. To perform the antibiotic assay, the Base Agar should be prepared on the same day as the test. For the cylinder method, a base layer of 21 ml is required. Once the base medium has solidified, seed layer inoculated with the standardized culture can be overlaid. Even distribution of the layer is important.

COMPOSITION

Ingredients	Gms / Ltr
Veg Hydrolysate	17.000
Papaic digest of soyabean meal	3.000
Sodium chloride	5.000
Dipotassium phosphate	2.500
Dextrose	2.500
Agar	20.000

PRINCIPLE

The medium contains Veg hydrolysate and Papaic digest of soyabean meal serves as source for essential nutrients. Dextrose stimulates the growth by providing carbon and energy. Phosphates in the medium enhance buffering action and sodium chloride maintains osmotic equilibrium in the medium.

INSTRUCTIONFOR USE

Dissolve 50 grams in1000 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 or as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
Bordetella bronchiseptica	4617	50-100	Good	40-50%	Colistimethate sodium, Colistin, Polymyxin B	35-37°C	18-24 Hours
Pseudomonas aeruginosa	25619	50-100	Luxuriant	>=70%	Carbenicillin	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Carbenicillin	35-37°C	18-24 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

1. Groveand Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition.

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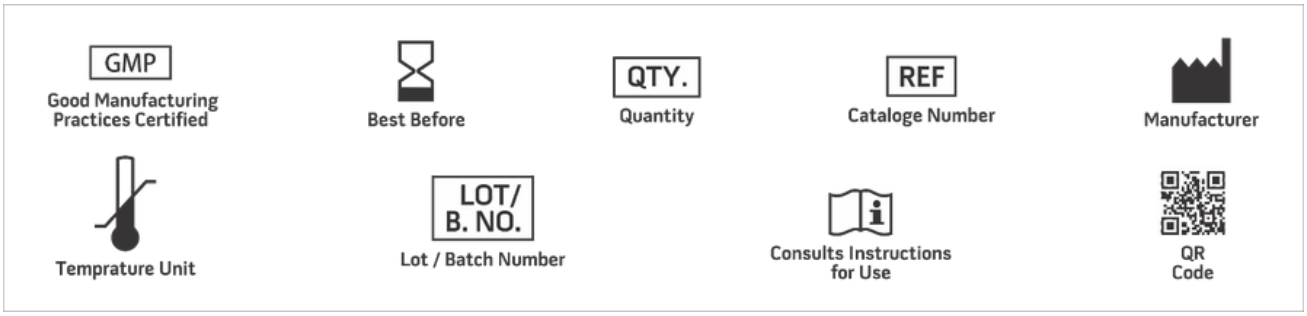

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only