CM 20160 – ANTIBIOTIC SULPHONAMIDE SENSITIVITY TEST AGAR (ASS AGAR)

INTENDED USE

Fortesting antimicrobial activity of antibiotics and sulphonamides and also for detecting the presence of antimicrobial substances.

PRODUCT SUMMARY AND EXPLANATION

Ericssonand Sherris on behalf of the German Institute of Standardisation and World Health Organization (WHO) developed an accurate quantitative method for antibiotic sensitivity testing. WHOs Expert Committee on Antibiotics have set certain requirements to be fulfilled by Sensitivity Test Agar. Antibiotic Sulphonamide Sensitivity Test Agar (ASS Agar) fulfils these criteria. This media can be used for detecting the presence of antimicrobial substances in milk, urine and other fluids as cited by Ansorg and Sogard. The presence of various amino acids makes the media favourable for growth and testing of various fastidious organisms like Listeria, Streptococci and Neisseria etc. The medium constituents do not inhibit the growth of the test organism. Therefore, the zones of inhibition obtained are solely due to the antibiotic used. Standard Methods are employed for sensitivity testing.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Beef extract	10.000
Dextrose (Glucose)	2.000
Sodium chloride	3.000
Disodium hydrogen phosphate	2.000
Sodium acetate	1.000
Adenine	0.010
Guanine	0.010
Uracil	0.010
Xanthine	0.010
Agar	12.000

PRINCIPLE

Proteose peptone and beef extract provides nitrogen and carbon source, long chain amino acids, vitamins and other necessary nutrients to the organisms. Glucose serves as the carbon source. Disodium hydrogen phosphate helps in maintaining the pH and preventing the effect of pH change on antibiotic diffusion.

INSTRUCTION FOR USE

Dissolve 40.04 gramsin 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. Cool to 45-50°C.
Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow 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	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenii	6633	50-100	Good	40-50%	35-37°C	18-24 Hours
Bacteroides vulgatus	8482	50-100	Good	40-50%	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Good	40-50%	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good	40-50%	35-37°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Good	40-50%	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

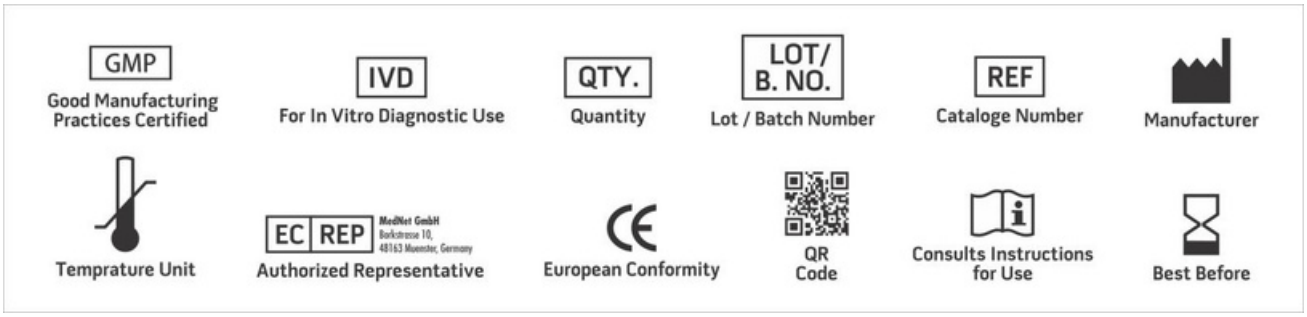
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Ansorg R., Zippel H., u. Thomssen R., Zbl. Bakt. Hyg., I. Orig., A 230, 492-507 (1975).
3. DIN Deutsches Institut für Normung e. V.: Methoden zur Empfindlichkeitsprüfung von bakteriellen Krankheitserregern (außer Mykobakterien) gegen Chemotherapeutika
4. Ericsson H. M., Sherris J. C., Acta. Path. Microbiol. Scand. B. Suppl. 217, 1971. 5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.



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

*For LabUse Only