

TM 856 - SENSITIVITY TEST MEDIUM

INTENDED USE

For sensitivity tests with sulphonamides and other antibiotics.

PRODUCT SUMMARY AND EXPLANATION

Sensitivity testing has been used for several decades as a guide for antimicrobial therapy of serious infections. Such testing is most frequently performed when bactericidal antimicrobial agent therapy is considered necessary. It has also been used to ensure that the infecting organism is killed by (not tolerant to) the bactericidal compounds. Sensitivity Test Medium is designed for use in sensitivity tests with sulphonamides and other antimicrobial agents.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Veal, infusion from	10.000
Dextrose	10.000
Sodium chloride	3.000
Disodium phosphate	2.000
Sodium acetate	1.000
Adenine sulphate	0.010
Guanine	0.010
Uracil	0.010
Xanthine	0.010
Agar	15.000

PRINCIPLE

Incorporation of sodium acetate and veal infusion in this medium renders the medium to give better defined zones of inhibition in sensitivity plate tests. Proteose peptone supplies the nitrogenous nutrients to the organisms. Addition of nucleoside bases supports the growth of common gram-positive and gram-negative organisms. Dextrose serves as the carbohydrate and energy source for many microorganisms. The medium is well buffered and isotonic due to the inclusion of disodium phosphate and sodium chloride respectively.

INSTRUCTION FOR USE

- Dissolve 51.04 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 118-121°C for 15 minutes.
- Cool to 50°C and add sterile serum or blood aseptically if desired.
- 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)	: 7.3±0.2

INTERPRETATION



Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	≥50%	35-37°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Good-luxuriant	≥50%	35-37°C	18-24 Hours
<i>Bacillus subtilis</i>	6633	50-100	Good-luxuriant	≥50%	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Good-luxuriant	≥50%	35-37°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	≥50%	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.

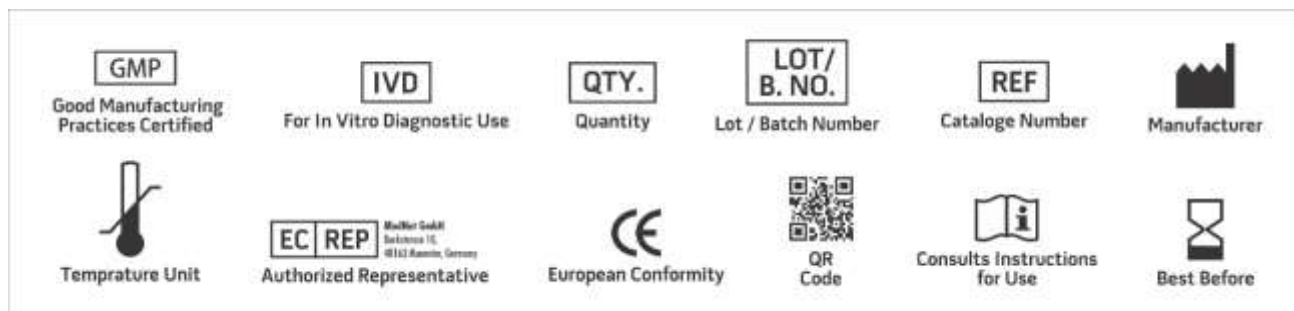
DISPOSAL

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

REFERENCES

1. Atlas R.M., 1993, Handbook of Microbiological Media, CRC Press, Inc., Boca Raton.





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

***For Lab Use Only**
Revision: 08 Nov., 2019