

TM 332S - SOYA CASEIN DIGEST BROTH (TRYPTONE SOYA BROTH W/ SPS)

INTENDED USE

For cultivation of fastidious and non-fastidious microorganism especially *H. influenzae*, *N. meningitidis*, *S. pneumonia*.

PRODUCT SUMMARY AND EXPLANATION

Soyabean Casein Digest Medium is recommended by various pharmacopeias as a sterility testing and as a microbial limit testing medium. This medium is a highly nutritious medium used for cultivation of a wide variety of organisms. Bacteremia is a serious and often life-threatening clinical condition. An important diagnostic tool for this condition is to analyze a blood specimen for the growth of bacteria on selected growth media. Such media often contain SPS as an anticoagulant and as an inhibitor of the bacteriostatic and bactericidal effects of blood cells and plasma factors.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Sodium chloride	5.000
Dextrose(Glucose)	2.500
Dipotassium hydrogen phosphate	2.500
Sodium polyanethol sulphonate (SPS)	0.300

PRINCIPLE

The combination of tryptone and soya peptone makes the medium nutritious by providing nitrogenous and carbonaceous compounds, amino acids and long chain peptides for the growth of microorganisms. Dextrose serve as the carbohydrate source and dibasic potassium phosphate buffers the medium. Sodium chloride maintains the osmotic balance of the medium. SPS has the added advantage of annulling the natural bactericidal action of blood and is not inhibitory.

INSTRUCTION FOR USE

- Dissolve 30.30 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

Note: If any fibres are observed in the solution, it is recommended to filter the solution by using a 0.22micron filter to eliminate the possibility of presence of fibres.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured clear solution without any precipitate.
pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	6538	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Escherichia coli</i>	8739	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Pseudomonas aeruginosa</i>	9027	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Bacillus subtilis</i> subsp. <i>spizizenii</i>	6633	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Micrococcus luteus</i>	9341	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Salmonella</i> Typhimurium	14028	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Streptococcus pneumoniae</i>	6305	50 -100	Luxuriant	30 -35 °C	18 -24 Hours
<i>Candida albicans</i>	10231	10 -100	Luxuriant	20 -25 °C	<=5 d

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.

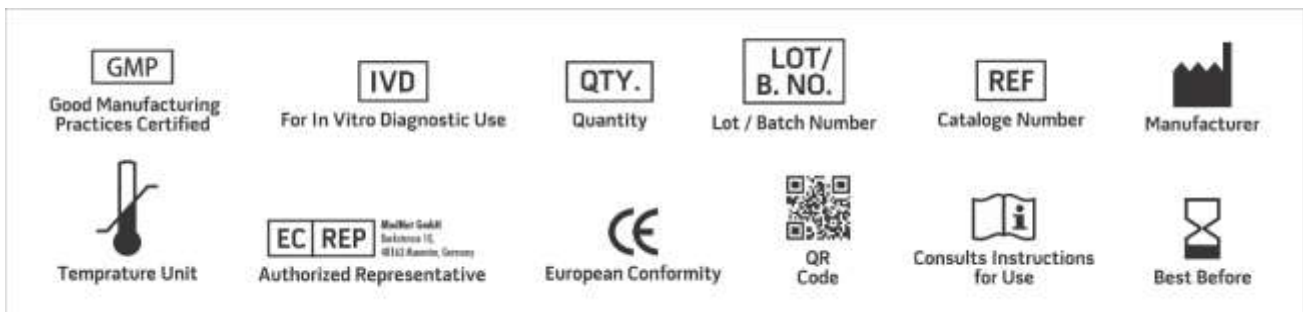
DISPOSAL



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

REFERENCES

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5. Belding, M. E., and S. J. Klebanoff. 1972. Effect of sodium polyanethole sulfonate on antimicrobial systems in blood. Appl. Microbiol. 24:691-698.
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NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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