TSMH 345- SOYA CASEIN DIGEST AGAR (as per USP/IP)

INTENDED USE

A general purpose medium used with or without blood for enrichment and isolation of fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Tryptone Soya Agar conforms as per USP and is used in microbial limit test and antimicrobial preservative - effective test. Gunn et al used this medium for the growth of fastidious organisms and study of haemolytic reaction after addition of 5%v/v blood. The combination of tryptone and soya peptone makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance. Soyabean Casein Digest Agar does not contain X and V growth factors. It can be conveniently used in determining the requirements of these growth factors by isolates of Haemophilus by the addition of X-factor (DD020), V-factor (DD021), and X+V factor discs (DD022) factor to inoculated TSA plates.

COMPOSITION

Ingredients	Gms / Ltr
Pancreatic digest of casein	15.00
Agar	15.00
Soyatone (soya peptone)	5.00
Sodium chloride	5.00

PRINCIPLE

Soyabean Casein Digest Agar is a widely used medium, which supports the growth of wide variety of organisms even that of fastidious ones such as Neisseria, Listeria, and Brucella etc. The medium with addition of blood provides perfectly defined haemolysis zones, while preventing the lysis of erythrocytes due to its sodium chloride content. It has been frequently used in the health industry to produce antigens, toxins etc. It's simple and inhibitor-free composition makes it suitable for the detection of antimicrobial agents in the food and other products. Tryptone Soya Agar is recommended by various pharmacopoeias as sterility testing medium

INSTRUCTION FOR USE

- Dissolve 40 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely.
- If desired, aseptically add 5% v/v defibrinated blood in previously cooled medium to 45-50°C for cultivation. 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	: Basal Medium : Light yellow coloured clear to slightly opalescent gel. After addition of 5-7%w/v sterile defibrinated blood : Cherry red coloured opaque 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)	Recovery	Recovery w/ blood	Haemolysis	Incubation Temperature	Incubation Period
Staphylococcus aureus subsp. aureus	25923	50-100	>=70 %	>=70 %	beta	30-35°C	18-24 Hours
Staphylococcus aureus subsp. aureus	6538	50-100	>=70 %	>=70 %	beta	30-35°C	18-24 Hours
Escherichia coli	25922	50-100	>=70 %	>=70 %	none	35-37°C	18-24 Hours
Pseudomonas aeruginosa	*27853*	50-100	>=70 %	>=70 %	-	35-37°C	18-24 Hours
Streptococcus pneumoniae	*6305*	50-100	>=70 %	>=70 %	-	35-37°C	18-24 Hours
Salmonella Typhimurium	*14028*	50-100	>=70 %	>=70 %	-	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	>=70 %	>=70 %	-	35-37°C	18-24 Hours
Clostridium perfringenes	13124	50-100	>=70 %	>=70 %	-	35-37°C	18-24 Hours
Candida albicans	10231	50-100	>=70 %	>=70 %	-	30-35°C	<=5days
Aspergillus brasiliensis	16404	50-100	50-70%		-	30-35°C	<=5days

PACKAGING:
In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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.The United States Pharmacopoeia , 2019, The United States Pharmacopoeial Convention Inc., Rockville, MD.
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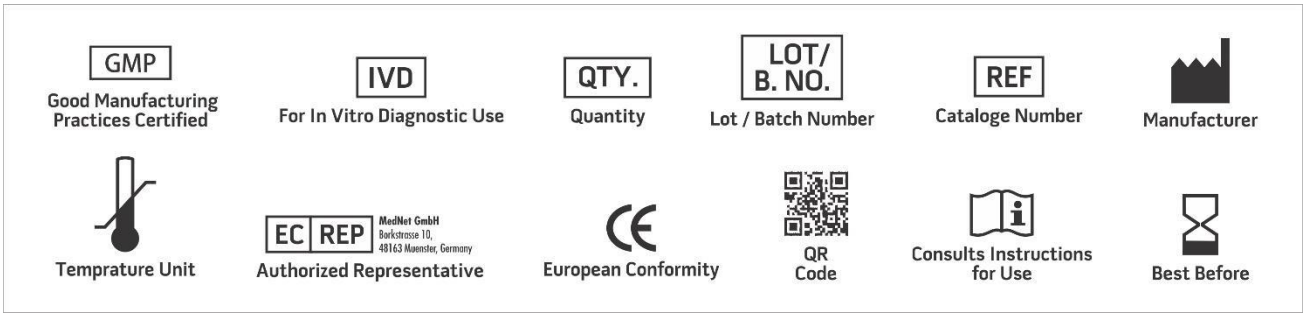
3.Gunn B. A., Ohashi D K., Gaydos C. A., Holt E. S., 1977, J. Clin. Microbiol., 5(6) : 650.
4.Forbes B. A., Sahm A. S. and Weissfeld D. F., 1998, Bailey and Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo
5.Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
6.Jorgensen, 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. Vol. 1.



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

***For Lab Use Only**

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