

TM 345 – TRYPTONE SOYA AGAR (SOYABEAN CASEIN DIGEST AGAR) (as per USP)

INTENDED USE

For enrichment and isolation of fastidious microorganisms with or without blood.

PRODUCT SUMMARY AND EXPLANATION

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. 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 contains 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, V-factor, and X+V factor discs factor to inoculated TSA plates.

COMPOSITION

Ingredients	Gms / Ltr
Pancreatic digest of casein	15.000
Soya peptone	5.000
Sodium chloride	5.000
Agar	15.000

PRINCIPLE

The combination of casein enzymic hydrolysate and papaic digest of soyabean meal makes the agar nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance in the media.

INSTRUCTION FOR USE

- Suspend 40 grams in 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. 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	: 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 incubation.

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery	Recovery w/ blood	Haemolysins	Incubation Temperature	Incubation Period
<i>Bacillus subtilis subsp. spizizenii</i>	6633	50 -100	Luxuriant	>=70 %	>=70 %	None	30-35°C	18-24 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50 -100	Luxuriant	>=70 %	>=70 %	Beta	30-35°C	18-24 Hours
<i>Staphylococcus aureus subsp. aureus</i>	6538	50 -100	Luxuriant	>=70 %	>=70 %	Beta	30-35°C	18-24 Hours
<i>Escherichia coli</i>	25922	50 -100	Luxuriant	>=70 %	>=70 %	None	30-35°C	18-24 Hours
<i>Escherichia coli</i>	8739	50 -100	Luxuriant	>=70 %	>=70 %	None	30-35°C	18-24 Hours
<i>Escherichia coli</i>	11775	50 -100	Luxuriant	>=70 %	>=70 %	None	30-35°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	27853	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	9027	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	10145	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Micrococcus luteus</i>	9341	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours

<i>Streptococcus pneumoniae</i>	6305	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Salmonella Typhimurium</i>	14028	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours
<i>Candida albicans</i>	10231	10 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	<=5days
<i>Candida albicans</i>	2091	10 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	<=5days
<i>Aspergillus brasiliensis</i>	16404	10 -100	Good-luxuriant	50-70%	>=70 %	-	30-35°C	<=5days
<i>Clostridium perfringenes</i>	13124	50 -100	Luxuriant	>=70 %	>=70 %	-	30-35°C	18-24 Hours

PACKAGING:

In pack size of 100gm and 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. The United States Pharmacopoeia, 2019, The United States Pharmacopoeial Convention Inc., Rockville, MD.
2. Indian Pharmacopoeia, 2018, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.
3. Forbes B. A., Sahn A. S. and Weissfeld D. F., 1998, Bailey and Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Birkstrasse 10 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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