TM 1440 – TRYPTONE SOYA AGAR

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

PRODUCT SUMMARY AND EXPLANATION
Tryptone Soya 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.

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 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.

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 : 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 was observed after incubation.

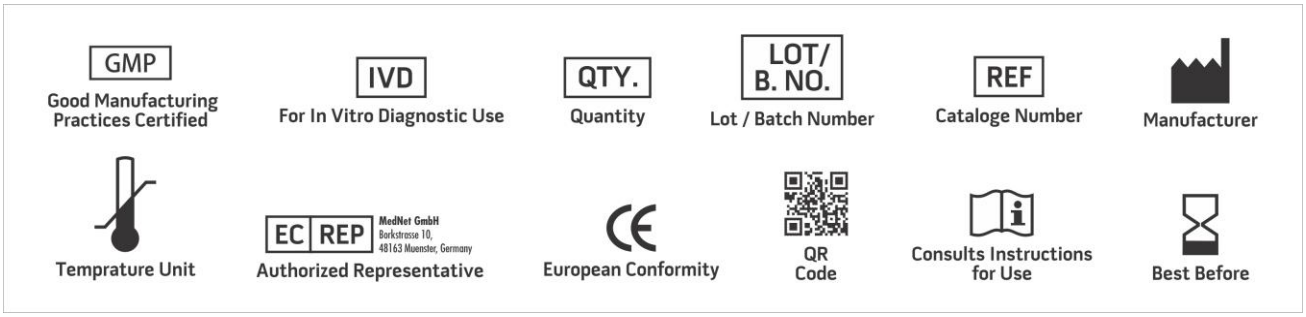
Microorganism	ATCC	Inoculum (CFU)	Growth	Growth with blood	Recovery	Haemolysis	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	Luxuriant	>70%	None	35 - 37°C	18-48 Hours
Bacteroides vulgatus	8482	50-100	Luxuriant	Luxuriant	>70%	None	35 - 37°C	18-48 Hours
Candida albicans	10231	50-100	Luxuriant	Luxuriant	>70%	None	25-30°C	2-7 days
Neisseria meningitidis	13090	50-100	Good	Luxuriant	>70%	None	35 - 37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	Luxuriant	>70%	Beta	35 - 37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant	Luxuriant	>70%	Beta	35 - 37°C	18-48 Hours

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



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

***For Lab Use Only**

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