

## TMK 332 – TRYPTONE SOYA BROTH (SOYA CASEIN DIGEST MEDIUM)

### INTENDED USE

For detection of microorganisms in blood.

### PRODUCT SUMMARY AND EXPLANATION

TRYPTONE SOYA BROTH or SOYA CASEIN DIGEST MEDIUM (SCDM) is used for the cultivation of fastidious and non-fastidious microorganisms that can be present in the blood. The medium is also used for a multitude of purposes including maintenance of stock cultures, plate counting and isolation of microorganisms from a variety of specimen types.

### COMPOSITION

Ingredients	Gms / Ltr
Pancreatic digest of casein	17.000
Sodium chloride	5.000
Papaic digest of soybean (soyabean)	3.000
Dipotassium hydrogen phosphate	2.500
Glucose	2.500

### PRINCIPLE

Papaic digest of soyabean meal and pancreatic digest of casein makes this medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Natural sugars in soybean promote growth of fastidious organism. Dipotassium hydrogen phosphate serves as the buffer in the medium. Sodium chloride maintains the osmotic balance. Glucose is the fermentable source of carbon.

### INSTRUCTION FOR USE

1. Remove the plastic cap and disinfect the part of the rubber stopper which is now exposed.
2. Draw patient's blood with the sterile needle and syringe and transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood.
3. Venting may be required for aerobic culture and not in case of anaerobic cultures.
4. Incubate at 30-35°C for 18-48 hours and further for 7 days to confirm negative results.

Note: Tryptone Soya Broth is a ready to use liquid media in glass bottle. The medium is pre-sterilized, hence sterilization is not required.

### QUALITY CONTROL SPECIFICATIONS

Appearance of the medium	:	Light yellow colour, clear solution.
Quantity of Medium	:	25ml / 50ml of the medium in glass bottle
pH (at 25°C)	:	7.3 ± 0.2
Sterility Check	:	Passes release criteria

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Bacillus subtilis</i>	6633	50-100	Luxuriant	30-35°C	18-48 hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	30-35°C	18-48 hours
<i>Staphylococcus aureus</i>	6538	50-100	Luxuriant	30-35°C	18-48 hours
<i>Salmonella typhimurium</i>	14028	50-100	Luxuriant	30-35°C	18-48 hours
<i>Candida albicans</i>	10231	50-100	Luxuriant	20-25°C	18-48 hours
<i>Aspergillus brasiliensis</i>	16404	Point Inoculation	Luxuriant	20-25°C	18-48 hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant	30-35°C	18-48 hours
<i>Streptococcus pneumoniae</i>	6305	50-100	Luxuriant	30-35°C	18-48 hours

#### PACKAGING:

Aluminium capped bottles containing 25ml (Paediatric) or 50 ml (Adult) media.

#### STORAGE

On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from unopened packages can be used up to the expiration date. Opened bottles must be used immediately.

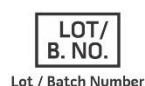
**Product Deterioration:** Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. Brewer, 1940, J. Am. Med. Assoc., 115:598.
2. The United States Pharmacopoeia, 2018, The United States Pharmacopoeial Convention, Rockville, MD.
3. British Pharmacopoeia, 2016, The Stationery Office British Pharmacopoeia
4. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines.
5. Williams H., (Ed.), 2005, Official Methods of Analysis of the Association of Official Analytical Chemists, 19th Ed., AOAC, Washington, D.C
6. Marshall, Gunnison and Luxen, 1940, Proc. Soc. Exp. Biol. Med., 43:672.
7. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.



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

**\*For Lab Use Only**  
Revision: 16<sup>th</sup> Feb. 2022

