

TMK 303– BILE BROTH BASE

INTENDED USE

For cultivation of Enterobacteriaceae group.

PRODUCT SUMMARY AND EXPLANATION

BILE BROTH BASE is used for cultivation of Enterobacteriaceae group. The Enterobacteriaceae is a large family of Gram-negative bacteria that includes, along with many harmless symbionts, many of the more familiar pathogens, such as *Salmonella*, *Escherichia coli*, *Yersinia pestis*, *Klebsiella* and *Shigella*. Other disease causing bacteria in this family include *Proteus*, *Enterobacter*, *Serratia*, and *Citrobacter*. This medium is useful for culturing blood samples from a patient suspected with enteric fever. The Blood culture is inoculated as blood clot along with Streptokinase, after separating it from the serum. The streptokinase causes rapid clot lysis with the release of bacteria trapped in the clot.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Sodium taurocholate	5.000
Sodium chloride	5.000

PRINCIPLE

The Medium is composed of peptic digest of animal tissue which acts as a source of nitrogen for bacterial growth. Gram positive bacteria's are inhibited by sodium taurocholate, which allows the growth of gram negative bacteria only. Osmotic equilibrium of the medium is maintained by sodium chloride.

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 35±2°C for 18-48 hours and further for 7 days to confirm negative results.

Note: Bile broth base 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 colored, clear solution.
Quantity of Medium	:	25ml / 50ml of the medium in glass bottle
pH (at 25°C)	:	7.6 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Good- Luxuriant	35 ± 2°C	18 - 48 hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	35 ± 2°C	18 - 48 hours



<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	35 ± 2°C	18 - 48 hours
<i>Staphylococcus aureus</i>	25923	50-100	Inhibited	35 ± 2°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.

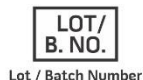
Product Deterioration: Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Colle, J.G., Duguid J.P., Fraser A.G. and Marmion, B.P. (Eds.) 1989 Mackie and McCartney Practical Medical Microbiology, Vol. 2, p: 134 Longman Group, UK.



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

***For Lab Use Only**
Revision: 16th Feb. 2022