

TM 303 – BILE BROTH BASE

INTENDED USE

For cultivation of *Enterobacteriaceae* group.

PRODUCT SUMMARY AND EXPLANATION

Enterobacteriaceae inhabit a wide variety of niches that include the human gastrointestinal tract and various environmental niches. When blood samples from a patient with suspected enteric fever is submitted for the widal test, it is useful as a routine to culture the clot after separation of serum. If it is known that the blood has been withdrawn with strict aseptic precautions, the clot may be placed in a wide tube half-filled with broth, or in a wide mouth screw-capped bottle containing 80 ml of broth. When there is any doubt regarding the presence of contaminating organisms, and this is always a possibility when blood specimens are sent to the laboratory from a distance, the clot should be transferred directly to a tube of sterile ox bile and disintegrated with aseptic precautions. After overnight incubation the bile culture is examined for enteric organism in the usual manner. A method of clot culture with Streptokinase has been recommended. Blood is allowed to clot in 5 ml quantities in sterile screw-capped universal containers. The separated serum is removed and 15 ml of 0.5% Bile Broth Base with Streptokinase 100 units/ml is added to each bottle. The streptokinase causes rapid clot lysis with release of bacteria trapped in the clot.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	20.000
Sodium taurocholate	5.000
Sodium chloride	5.000

PRINCIPLE

Peptone serves as a source of nitrogen, carbon, long chain amino acids and other essential amino acids. Sodium taurocholate inhibits majority of Gram-positive species. Sodium chloride maintains the isotonicity of the medium whereas addition of streptokinase solution causes rapid clot lysis with release of bacteria trapped in the clot.

INSTRUCTION FOR USE

- Dissolve 30.0 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and add 1 ml of Streptokinase solution (100000 units/ml).
- Mix well and dispense into sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured, clear solution without any haziness.
pH (at 25°C)	: 7.6±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Klebsiella aerogenes</i>	13048	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Salmonella Typhi</i>	6539	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i> <i>subsp. aureus</i>	25923	$\geq 10^4$	Luxuriant	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

- 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
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
- 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.
- Watson, K.C. 1955, Isolation of Salmonella Typhi from the blood stream. J. of Lab and Clinical Medicine 46:128-134.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Münster, 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**



Revision: 08 Nov., 2019

