

TM 448 – THIOL BROTH

INTENDED USE

For cultivation of bacteria from body fluids containing Penicillin, Streptomycin and Sulphonamides.

PRODUCT SUMMARY AND EXPLANATION

Thiol Medium is used for culturing microorganisms from body fluids and also other materials containing antibiotics like penicillin, streptomycin or sulphonamides. The efficacy of Thiol Medium to retain viability of *Vibrio* was initially described by Huddleson. The ability of Thiol Medium to neutralize antibacterials was demonstrated by Christensen. This media can also be used for the cultivation and maintenance of *Haemophilus*, *Vibrio* and *Meningococci*. Thiol Broth which is Thiol Medium devoid of agar is also recommended for growing anaerobic bacteria in blood cultures and for recovery of nutritionally variant *Streptococci* and *Bacteriodes*.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Yeast extract	5.000
Dextrose	1.000
Sodium chloride	5.000
Thiol compound	8.000
p-Amino benzoic acid (PABA)	0.050

PRINCIPLE

Proteose peptone and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Dextrose is the energy source. p-Amino benzoic acid serves as a preservative.

INSTRUCTION FOR USE

- Dissolve 29.05 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks to a depth of 6 cm for neutralization of Penicillin or in shallow layers for neutralization of Streptomycin.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent solution.
pH (at 25°C)	: 7.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation. Growth observed after addition of antibiotic concentrations upto 100 units of Penicillin or 1,000 micrograms of Streptomycin.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Neisseria meningitidis</i>	13090	50-100	Poor-fair	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Good-luxuriant	35-37°C	18-48 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Good-luxuriant	35-37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Good-luxuriant	35-37°C	18-48 Hours

PACKAGING:

In pack size of 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

- Huddleson I. F., 1948, J. Bacteriol., 56:508.
- Christensen D. H., 1947, Presented at the Michigan Branch, Society of American Bacteriologists, Detroit, Mich, December 12, 1947.
- Donnelly J. P., 1994, Infect. Dis. Alert 6:109.
- Isenberg (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. 1, American Society for Microbiology, Washington, D.C.
- Szawatkowski M. V., 1976, Med. Lab. Sci., 33:5. 6. Shanson D. C. and Barnicoat, 1975, J. Clin. Pathol., 28:407.

 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 Barkstrasse 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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