

## TM 2067 – ENRICHED THIOGLYCOLLATE BROTH

### INTENDED USE

For isolation, cultivation and identification of a wide variety of obligate anaerobic bacteria.

### PRODUCT SUMMARY AND EXPLANATION

Enriched Thioglycollate Medium is recommended for use in isolation and cultivation of fastidious and obligate anaerobic bacteria from clinical materials. This medium is often used for susceptibility testing of anaerobes by broth disk elution method. This medium is the modification of original Brewers formulation, with the addition of vitamin K1, sodium bicarbonate, hemin and rabbit or horse serum.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Dextrose (Glucose)	6.000
Sodium chloride	2.500
Sodium thioglycollate	0.500
L-Cystine	0.250
Sodium sulphite	0.100
Hemin	0.005
Vitamin K1	0.0001
Agar	0.700
Sodium bicarbonate	1.000

### PRINCIPLE

The medium consists of Tryptone and soya peptone which supports growth of wide variety of fastidious microorganisms. Sodium thioglycollate lowers the oxidation-reduction potential for anaerobic growth and also neutralizes the bacteriostatic effect of mercurial compounds. Most organisms show earlier and more vigorous growth in presence of dextrose, hemin and vitamin K1. Hemin is the source of X-factor, which stimulates the growth of many microorganisms.

### INSTRUCTION FOR USE

- Dissolve 31.06 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 12-15 psi pressure (118-121°C) for 15 minutes.
- Aseptically add 10% rabbit or horse serum. Dispense in tubes or flasks as desired. Cool and dry under 85% N<sub>2</sub>, 10% H<sub>2</sub> and 5% CO<sub>2</sub> atmosphere.

### QUALITY CONTROL SPECIFICATIONS



**Appearance of Powder** : Cream to yellow homogeneous free flowing powder.  
**Appearance of prepared medium** : Light amber coloured, clear to slightly opalescent solution in tubes.  
**pH (at 25°C)** : 7.0 ± 0.2

### INTERPRETATION

Cultural characteristics observed under anaerobic condition after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Bacteroides vulgatus</i>	8482	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Clostridium perfringens</i>	12924	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Luxuriant	35-37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	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

- 1 Allen S. D., Siders J. A. and Movler M., 1985, In Manual of Clinical Microbiology, Lennette, Balows, Hausler and Shadomy (Eds.), 4th Ed., ASM, Washington, D.C.
2. Brewer J. H., 1940 and 1943, J. Bacteriol., 39:10 and 46:39
3. Brewer J. H., 1943. J. Bacteriol., 46:39



4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Editio
5. 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.

 <b>GMP</b> Good Manufacturing Practices Certified	 <b>IVD</b> For In Vitro Diagnostic Use	 <b>QTY.</b> Quantity	 <b>LOT/ B. NO.</b> Lot / Batch Number	 <b>REF</b> Catalogue Number	 <b>Manufacturer</b>
 <b>Temperature Unit</b>	 <b>EC REP</b> Authorized Representative <small>MedNet GmbH Barkstrasse 10 48163 Muenster, Germany</small>	 <b>European Conformity</b>	 <b>QR Code</b>	 <b>Consults Instructions for Use</b>	 <b>Best Before</b>

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

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**