

## TM 881 – THIOGLYCOLLATE MEDIUM W/ CALCIUM CARBONATE

### INTENDED USE

For maintenance of anaerobic cultures, particularly highly fermentative types.

### PRODUCT SUMMARY AND EXPLANATION

Thioglycollate Medium with Calcium carbonate is a modification of the original medium of thioglycollate described by Brewer and is recommended for maintenance of stock cultures.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	17.000
Papaic digest of soyabean meal	3.000
Dextrose	6.000
Sodium chloride	2.500
Sodium thioglycollate	0.500
L-Cystine	0.250
Sodium sulphite	0.100
Calcium carbonate	0.100
Agar	0.700

### PRINCIPLE

Casein enzymic hydrolysate, soyabean meal and L-cystine provides amino acids and other nitrogenous substances to support bacterial growth. Yeast extract provides the B-complex vitamins. Sodium chloride provides essential ions. Dextrose is an energy source. The incorporation of calcium carbonate helps to neutralize acid produced during growth. The reducing action provided by sodium thioglycollate and sodium sulphite binds molecular oxygen, thereby maintaining a low Eh. A small amount of agar is added to retard the absorption of oxygen by reducing convection currents in the medium.

### INSTRUCTION FOR USE

- Dissolve 30.15 grams in 1000 ml distilled water. Heat just to boiling.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 25°C and store in a cool, dry place preferably below 25°C.

Note: Due to the presence of calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured very slightly opalescent solution over a slight white precipitate on standing.
pH (at 25°C)	: 7.0±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Clostridium perfringens</i>	12924	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	>=70%	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. Brewer J.H 1940. J Bacteriol 39:10.
2. Vera H.D., 1944. J. Bacteriol 47:59-70.
3. Reischelderfer C, and J.I. Mangels. 1992. Cultural media for anaerobes p2.3.1-2.3.8. In H.D Isenberg (ed.), Clinical Microbiology procedures handbook, vol. 1-American Society for Microbiology, Washington. 4. MacFaddin., J.F 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol.1 William and Wilkins, Baltimore.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

\*For Lab Use Only  
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