

TM 2371 – THIOGLYCOLLATE MEDIUM W/O DEXTROSE AND INDICATOR

INTENDED USE

Used as a base for fermentation studies of anaerobic and microaerophilic organisms and for detecting microorganisms in normally sterile materials.

PRODUCT SUMMARY AND EXPLANATION

Thioglycollate Medium without dextrose and indicator is the modification of original Thioglycollate medium used for the fermentation study of anaerobes and for enhancement of sporulation. Omission of dextrose facilitates it to be used in fermentation studies with the addition of desired carbohydrate. Some Clostridia remain viable for a longer period and sporulate better in the absence of carbohydrate and thus this medium could be used for sporulations.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	15.000
Sodium chloride	2.500
Sodium thioglycollate	0.500
L-Cystine	0.250
Yeast extract	5.000
Agar	0.750

PRINCIPLE

Casein enzymic hydrolysate, L-cystine and yeast extract provide essential nutrients like nitrogenous compounds, carbon, sulphur, minerals and amino acids. Sodium thioglycollate is incorporated as a reducing agent which lowers the oxidation reduction potential thereby enabling the obligate anaerobes to multiply. A small amount of agar is added to retard the absorption of oxygen by reducing convection currents in the medium.

INSTRUCTION FOR USE

- Suspend 24.00 grams in 1000 ml distilled water.
- If the medium is to be used for fermentation studies or for diagnostic work add 0.5 to 1% carbohydrate of choice. Heat to boiling to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Alternatively, sterile carbohydrate solutions may be added to the broth after sterilization. The prepared medium should be stored in the dark at room temperature.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured very slightly opalescent viscous solution.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added carbohydrates.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Clostridium sporogenes</i>	11437	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Bacillus subtilis</i>	6633	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Candida albicans</i>	10231	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Micrococcus luteus</i>	10240	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good-luxuriant	>=50%	35-37°C	48 Hours
<i>Bacteroides vulgatus</i>	8482	50-100	Fair	>=50%	35-37°C	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. Am Med. Assoc., 115, 598.
2. Brewer J. H., 1940, J. Bacteriol., 39:10.



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 Buckstrasse 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**
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