

TM 2369 - THIOGLYCOLLATE MEDIUM W/ K AGAR

INTENDED USE

For cultivation of anaerobic, microaerophilic and aerobic microorganisms and for sterility testing procedures.

PRODUCT SUMMARY AND EXPLANATION

Thioglycollate Medium with K Agar is used for cultivating anaerobic, microaerophilic and aerobic microorganisms and for sterility testing procedures.

COMPOSITION

Ingredients	Gms / Ltr	
Casein enzymic hydrolysate	15.000	
Yeast extract	5.000	
Dextrose	5.500	
Sodium chloride	2.500	
L-Cystine	0.500	
Sodium thioglycollate	0.500	
Resazurin, sodium salt	0.001	
K Agar	0.750	

PRINCIPLE

Casein enzymic hydrolysate and yeast extract supply nitrogenous compounds, vitamin B complex and other growth nutrients to the microorganisms. Dextrose is the carbohydrate source. L-cystine is the amino acid source. Sodium thioglycollate reduces Eh potential. Resazurin is the redox indicator. Small amount of K agar helps in creating anaerobic condition by hampering the convection currents of the air. Sodium chloride maintains osmotic equilibrium.

INSTRUCTION FOR USE

- Dissolve 29.75 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Store in a cool dark place preferably below 25°C.

Note: If more than upper one third has acquired pink colour, the medium may be restored once by heating in a water bath or in a free flowing steam until the pink colour disappears.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light yellow coloured clear to very slightly opalescent fluid with upper 10% or

less medium pink on standing.

pH (at 25°C) : 7.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	35-37°C	18-48 Hours
Bacteroides vulgatus	8482	50-100	Fair	35-37°C	18-48 Hours
Candida albicans	10231	50-100	Luxuriant	25-30°C	2-5 Days
Clostridium sporogenes	11437	50-100	Luxuriant	35-37°C (Anaerobic)	18-48 Hours
Micrococcus luteus	10240	50-100	Luxuriant	35-37°C	18-48 Hours
Neisseria meningitidis	13090	50-100	Luxuriant	35-37°C	18-48 Hours
Streptococcus pyogenes	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. Vera H.D., 1944, J. Bacteriol., 47:59.
- 2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.





































NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







