

## 28976 Thioglycollate Medium with K Agar

Thioglycollate Medium with K Agar is used for the cultivation of anaerobic, micro-aerophilic and aerobic microorganisms and for sterility testing procedures (1,2).

### Composition:

Ingredients	Grams/Litre
Casein Enzymic Hydrolysate	15.0
Yeast Extract	5.0
Dextrose	5.5
Sodium Chloride	2.5
L-Cystine	0.5
Sodium Thioglycollate	0.5
Resazurin, Sodium	0.001
Agar	0.75
Final pH 7.1 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Yellow colored, homogeneous, free flowing powder.  
 Color and Clarity: Light yellow colored, clear to very slightly opalescent fluid with the upper 10% or less of the medium a pink color on standing

### Directions:

Suspend 29.8 g of Thioglycollate Medium with K Agar in 1000 ml of distilled water. Heat to boiling to dissolve the medium completely. Dispense and sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. Store in a cool, dark place preferably below 25°C.

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

### Principle and Interpretation:

Casein enzymic hydrolysate and the yeast extract supply nitrogenous compounds and vitamin B complex. Dextrose is the carbohydrate source. L-cystine is an amino acid source and a reducing agent. Resazurin is the redox indicator, if the color change from pink to white the medium is under anaerobic conditions. A small amount of K agar helps in creating an anaerobic condition. Sodium chloride maintains the osmotic equilibrium. Sodium thioglycollate reduces the Eh potential.

Cultural characteristics after 18-48 hours at 35-37°C.

Organisms (ATCC)	Growth
<i>Bacillus subtilis</i> (6633)	+++
<i>Candida albicans</i> (10231)*	+++
<i>Clostridium sporogenes</i> (11437)*	+++
<i>Micrococcus luteus</i> (10240)*	+++
<i>Neisseria meningitidis</i> (13090)	+++
<i>Streptococcus pyogenes</i> (19615)	+++
<i>Bacteroides vulgatus</i> (8482)*	++

Key: \* = these cultures may be incubated at 25-30°C for 2-7 days.



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## References:

1. Vera, H.D., (1944). J. Bacteriol. 47, 59.
2. MacFaddin, J., (1985). Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol.1. Williams and Wilkins. Baltimore, Maryland.
3. American Type Culture Collection, Manassas, Va., U.S.A.

## Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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