Thioglycollate Agar

Intended Use
Thioglycollate Agar is recommended for cultivation of anaerobic microorganisms.

Summary
Thioglycollate Agar is used for the cultivation of aerobic as well as anaerobic microorganisms in the performance of sterility tests. It is prepared based on the formula specified by US Pharmacopoeia and APHA. This medium neither requires anaerobic jar nor any special sealing for the cultivation of anaerobes. Thioglycollate Agar is also recommended for the cultivation of *Clostridium* species and in the culture of *Desulfotomaculum nigrificans*.

Principle
Casein enzymic hydrolysate, yeast extract provides nitrogenous compounds, vitamin B and other essential growth nutrients. Dextrose is the fermentable carbohydrate and energy source. Resazurin is the redox indicator. Thioglycollate neutralizes the bacteriostatic effect of mercurial compounds used as the preservatives in the injection solution.

Formula*

Ingredients	**g/L**
Casein enzymic hydrolysate	15.0
L-Cystine	0.5
Dextrose	5.5
Yeast extract	5.0
Sodium chloride	2.5
Sodium thioglycollate	0.5
Resazurin	0.001
Agar	20.0
Final pH (at 25°C)	7.1 ± 0.2

*Adjusted to suit performance parameters

Type of Specimen
Pharmaceutical sample

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 49.00 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Dispense as desired and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Light amber coloured, clear to slightly opalescent (turning red due to aeration on standing) gel forms in petridishes.
Cultural Response: Cultural characteristics observed after incubation of 40-48 hours at 35°C-37°C under anaerobic condition.

Organism (ATCC)	**Growth**
Clostridium perfringens (12924)	Good
Clostridium sporogenes (19404)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. The United States Pharmacopoeia, 1985 21st rev. U.S. Pharmacopocial Convention, Rockville, M.D.
2. Speck M. L.(ed.), 1985, Compendium of Methods for the Microbiological examination of Foods, 2nd ed., APHA, Washington, D.C.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	**Product description**	**Pack Size**
201200110500	Dehydrated Culture Media	500 g