

## TM 1105 – TRANSGROW MEDIUM BASE

### INTENDED USE

For cultivation and transport of fastidious microorganisms especially *Neisseria* species.

### PRODUCT SUMMARY AND EXPLANATION

Gonococcus is a very fastidious organism and care should be taken in the collection of specimens and their transport to the laboratory. Best results are achieved by the direct inoculation of culture plates with patient's secretions, followed by immediate incubation at 36-37°C in a moist atmosphere containing 5-10% CO<sub>2</sub>. When direct plating and immediate incubation is impracticable, several transport and culture systems are available. These consist of a selective medium, usually present in small chambers containing CO<sub>2</sub> or a CO<sub>2</sub> generating system. Transgrow media can be inoculated directly from the patient and transported to the laboratory either before or after incubation.

Transport media are chemically defined, semisolid, non-nutritive, phosphate buffered media that provide a reduced environment. Transport media are formulated to maintain the viability of microorganisms without significant increase in growth. Thayer Martin Selective Agar was developed for the primary isolation of *Neisseria gonorrhoeae* and *Neisseria meningitidis* from specimens containing heterogeneous microflora taken from the throat, rectum and vagina. Martin et al modified Thayer Martin Agar by adding trimethoprim to develop Transgrow Medium with a carbon dioxide-enriched atmosphere to increase the selectivity of the medium.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone, special	15.000
Sodium chloride	5.000
Corn starch	1.000
Dipotassium phosphate	4.000
Monopotassium phosphate	1.000
Agar	20.000

### PRINCIPLE

Special peptone in the medium provides nutrients to the organisms while starch neutralizes the toxic fatty acids if present in the agar. Haemoglobin provides the factor-X whereas the factor-V is provided by the added supplement that additionally also supplies vitamins, amino acids and coenzymes, which enhances the growth of pathogenic *Neisseria*. Trimethoprim, vancomycin and colistin inhibit gram-positive and gram-negative bacteria respectively. Nystatin inhibits fungi.

### INSTRUCTION FOR USE

- Dissolve 92 grams in 870 ml distilled water to make a double strength medium base.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.
- Cool to 50°C and aseptically add 100 ml sterile solution of 2% Haemoglobin, 2 vials of Vitamino Growth Supplement and rehydrated contents of 2 vials of V.C.N. Supplement or V.C.N.T. Supplement. Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS



<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Basal Medium: Light yellow coloured clear to slightly opalescent gel. After addition of haemoglobin, chocolate brown coloured, opaque gel forms in Petri plates.
<b>pH (at 25°C)</b>	: 7.2±0.2

## INTERPRETATION

Cultural characteristics observed after incubation with added sterile solution of 2% Haemoglobin, V.C.N. Supplement or V.C.N.T. Supplement and Vitamino Growth Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Candida albicans</i>	60193	50-100	None-poor	0-10%	35-37°C	40-48 Hours
<i>Neisseria gonorrhoeae</i>	43069	50-100	Good	40-50%	35-37°C	40-48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good	40-50%	35-37°C	40-48 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	None-poor	0-10%	35-37°C	40-48 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. Martin J. E., Billings T. E., Hackney J. F. and Thayer J. D., 1967, Public Health Rep. 82:361.
2. Thayer J. D. and Martin D. E., 1966, Pub Health Rep., 81:559.
3. Mitchell M. S., Rhoden P. L. and Marcus B. B., 1966, Am. J. Epidem., 83:74.
4. Martin J. E., Armstrong J. H. and Smith P. B., 1974, Appl. Microbiol., 27:802.
5. MacFaddin J. F., 1985, Media of Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.



<b>GMP</b> Good Manufacturing Practices Certified	<b>IVD</b> For In Vitro Diagnostic Use	<b>QTY.</b> Quantity	<b>LOT/ B. NO.</b> Lot / Batch Number	<b>REF</b> Catalogue Number	 Manufacturer
 Temperature Unit	<b>EC REP</b> 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**  
**Revision: 08 Nov., 2019**