

## Specification

Selective supplement for the isolation of pathogenic *Neisseria*.

## Presentation

10 Freeze dried vials  
Vial  
with: 3 ± 0.1 g

### Packaging Details

22±0.25 x 55±0.5 mm glass vials, tag labelled, White plastic cap - 10 vials per box.

### Shelf Life

49 months

### Storage

2-25 °C

## Composition

Compositon (g/vial)

Vancomycin..... 0.00150  
Colistin sulphate.....0.00375  
Trimethoprim..... 0.0025  
Nystatin..... 6250 IU

**Note :** Each vial is sufficient to supplement for 500 ml of medium Base GC + Enrichment Suppl.

Reconstitute the original freeze-dried vial

by adding

Sterile Distilled Water..... 6 ml

## Description /Technique

### Description:

The *Neisseria spp.* include a lot of commensal bacteria that colonize the mucosal surfaces of many animals. Between the 11 species that colonize humans, only two are pathogens *N. meningitidis* and *N. gonorrhoeae*.

*N. gonorrhoeae* is the causative agent of gonorrhoea and is transmitted via sexual contact

*Neisseria meningitidis* is the responsible for septicemia and meningitis.

In media like Thayer Martin and Chocolate agar *N. gonorrhoeae* and *N. meningitidis* produce colourless and translucent colonies.

Antibiotic incorporated in the medium with the inhibitory supplement avoid the growth of almost all the non pathogen micro organisms included in the sample, including the saprophytic species of *Neisseria*.

### Technique:

#### Thayer-Martin Agar:

Effective for the isolation of pathogen neisseria. It is prepared with GC Base Agar, haemoglobin and an inhibitor vial VCNAT.

It contains Vancomycin and Colistin to inhibit the oxidase-positive contaminants; Nystatin to prevent the growth of saprophytic fungi and trimethoprim that prevent the Proteus overgrowth.

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with 5ml sterile diluent in aseptic conditions and add it to 500 ml of melted Agar base cooled to 50°C.

Do not overheat once supplemented.

Pour the complete medium into Petri dishes and, once solidified on a flat surface, spread the plates either by streaking or by spiral method.

Incubate the plates in aerobic atmosphere at 37°C for 48h.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample or the specifications).

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation / recovery of *Neisserias spp.* must be confirmed by further microbiological and biochemical tests.

## Quality control

### Physical/Chemical control

Color : White-yellowish      pH: at 25°C

### Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020

Distribute the complete medium, cooled to 50 °C, into 90 mm plates

5% CO<sub>2</sub> atmosphere. Incubation at 35-37 °C during 24-48 h.

### Microorganism

*Neisseria meningitidis* ATCC® 13090

*Candida albicans* ATCC® 10231, WDCM 00054

### Growth

Good

Partial Inhibition

### Sterility Control

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

## Bibliography

- ATLAS, R.M. & L.C. PARKS (1997) Handbook of microbiological media. CRC Press. BocaRaton .Fla. USA.
- MacFADDIN, J. (1985) Media for isolation-cultivation-Identification-maintenance of medical bacteria. Vol. I. William & Wilkins. Baltimore.
- ODEGAARD, K. (1971) Trimethoprim for the prevention of overgrowth by swarming Proteus in the cultivation of gonococci. Acta. Path. Microbiol. Scand. Sect. (B) 79:545-548.
- THAYER, J. D. & J. E. MARTIN (1966). Improved medium selective for cultivation of Neisseria gonorrhoeae and N. meningitidis Pub. Health Rep. 81:559-562.