

Scharlau Microbiology - Technical Data

# Product: VCNT Selective supplement

## **Specification**

Selective supplement for the isolation of pathogenic Neisseria.

Presentation				
10 Freeze dried vials Vial with: 3 ± 0.1 g	<b>Packaging Details</b> 23x60 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	Shelf Life 49 months	Storage 2-25 °C	
Composition				

0.00150
0.00375
0.0025
6250 IU

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



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# **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. gonorrheae 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*.

#### <u>Technique:</u> <u>Thayer-Martin Agar:</u>

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 suplemented.

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 requied 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.



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# **Quality control**

**Physical/Chemical control** 

Color : White-yellowish

### 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% CO2 atmosphere. Incubation at 35-37 °C during 24-48 h.

#### Microorganism

Neisseria meningitidis ATCC<sup>®</sup> 13090 Candida albicans ATCC® 10231, WDCM 00054

Growth Good Partial Inhibition

#### Sterility control

Incubation 48 h at 30-35 °C and 48 h 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 gonorrheae and N. meningitidis Pub. Health Rep. 81:559-562.