

Technical Information

Nitsch & Nitsch Vitamins Solution (1000X)

Product Code: PL1023

Composition**

Ingredients	mg/Litre
myo - Inositol	100.00
Thiamine hydrochloride	0.50
Pyridoxine hydrochloride	0.50
Nicotinic acid (Free acid)	5.00
Folic acid	0.50
Biotin	0.05
Glycine (Free base)	2.00
TOTAL	0.11 gm/litre

Principle And Interpretation

Nitsch & Nitsch vitamins (1000X) is a filter sterilized stock solution. The stock contains vitamins as described by Nitsch & Nitsch. Add 1ml per litre of vitamins stock solution to the prepared medium to achieve the desired concentration.

Directions

Measure out approximately 600ml of distilled water. While stirring the water, add 1ml of vitamins solution. Add desired heat stable supplements prior to autoclaving. Adjust the medium to the desired pH using 1N HCl/NaOH. Make up the final volume to 1000ml with distilled water. Sterilize the medium by autoclaving at 15 lbs or 121°C for 15 minutes. Cool the autoclaved medium to 45°C before adding the filter sterilized heat labile supplements. Dispense the desired amount of medium in sterile culture vessels.

Quality Control

Appearance : Colourless to yellow, clear solution.
Sterility : No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.
pH at 25°C : 5.7 ± 0.5 of 50ml vitamins stock solution.

Cultural Response :

Cultural condition :

- Incubation period : 5 weeks
- Relative humidity : 60% ± 2%
- Temperature : 22°C ± 2°C
- Photoperiod (D:N) in hours : 16:8

Cell Line	Types Of Culture	Results
<i>Musa species</i>	Shoot culture	No structural deformity observed No necrotic tissues, Actively growing shoots, No toxicity to shoots
<i>Daucus species</i>	Callus culture	No necrotic tissues, Actively growing callus, No toxicity to callus

Storage and Shelf Life

Dehydrated macroelements powder is extremely hygroscopic and should be protected from atmospheric moisture. If possible, the entire content of each bottle should be used immediately after opening or else the unused portion should be stored in a desiccator and refrigerated at 2-8°C. Use before the expiry date.

Further Reading

1. Nitsch J.P. & Nitsch C., Science, (1969), 163, 85 - 87

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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