



Technical Data

Supplement for MS medium

PT778

Intended use: It is a mixture of soluble nitrogen which can be used as a supplement to various MS Medium developed by HiMedia.

Proprietary

Directions:

Suspend 3.550 grams in 50 ml distilled water. This supplement can be added to prepare complete MS Medium as per direction. Gelling agent may be added as desired. Make up the final volume to 1000ml with distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure 121°C for 15 minutes. Cool to 45-50°C. Add filter sterilized heat labile supplements. Mix well and dispense aseptically in sterile culture vessels.

Principle and Interpretation:

Nitrogen is the main nutrient component required for plant growth. Hence it is added to plant nutrient media in the form of nitrate ion and ammonium ion. For proper growth of a plant the relative ratio of nitrogen to ions is very important. Considering the requirement, MS supplement has been formulated which suits the composition of MS medium providing nitrogen source.

Quality Control:

Appearance	: White to off-white, homogeneous, free flowing powder.
Solubility	: 3.550 gm/litre is soluble in distilled water.
Colour and Clarity	: Colourless to light yellow coloured clear solution.
pH at 25°C	: 5.6 ± 0.5

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	Type of Culture	Results
<i>Spathiphyllum</i> species	Shoot culture	No structural deformity observed No necrotic tissues, Actively growing shoots, No toxicity to shoots

[The medium is prepared as per direction. The growth promoting activity of this plant tissue culture medium is evaluated using different plant species through three passages. Plant growth hormones (e.g. 2,4-D, NAA, Kinetin and 6-BAP) are added in suitable combinations and concentrations.]

Storage and shelf life:

Dehydrated plant tissue culture media 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 expiry period.

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