

### Technical Information

#### White Plant Salt Mixture

**Product Code: TS2015**

#### Composition\*\*

Ingredients	mg/litre
Potassium nitrate	80.00
Calcium nitrate	208.46
Magnesium sulphate	366.26
Sodium phosphate monobasic	16.52
Potassium chloride	65.00
Sodium sulphate	200.00
Manganese sulphate.H <sub>2</sub> O	3.79
Boric acid	1.50
Potassium iodide	0.75
Molybdenum trioxide	0.001
Zinc sulphate.7H <sub>2</sub> O	3.00
Copper sulphate.5H <sub>2</sub> O	0.01
Ferric sulphate	2.50
<b>TOTAL gm/litre</b>	<b>0.95</b>

#### Principle And Interpretation

White plant salt mixture has been specially formulated for plant cell, tissue and organ cultures. The mixture contains macroelements, microelements and iron source.

#### Directions

Suspend 0.94 grams of dehydrated plant salt mixture# in 600ml of distilled water and rinse media vial with small quantity of distilled water to remove traces of powder. Apply constant gentle stirring to the solution till the powder dissolves completely. 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 aseptically in sterile culture vessels.

# Weight after vacuum drying to remove all water

#### Quality Control

<b>Appearance</b>	: White to off-white, homogeneous, free flowing powder.
<b>Solubility</b>	: 0.94 gm/litre soluble in distilled water.
<b>Colour and Clarity</b>	: Colourless to light yellow, clear solution.
<b>pH at 25°C</b>	: 5.0 ±0.5 of 0.094% w/v dehydrated plant salt mixture.

### 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>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 plant salt mixture 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

- White P.R, The cultivation of Animal & Plant Cells, 2<sup>nd</sup> edition, Ronald Press, New York, (1963)

### Disclaimer :

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