Product Information Sheet

L449
Lloyd & McCown Woody Plant Basal Medium

Synonym: WPM

Properties

Form:	Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working Concentration:	2.41 g/L
Storage Temp:	2 – 6° C
Storage Temp of Stock Solution:	Preparation of concentrated solutions is not recommended as insoluble precipitates may form.
Other Notes:	Contains the macro- and micronutrients and vitamins as described by Lloyd and McCown (1981). pH = 3.5 – 4.5

Formula (mg/L)

Ammonium Nitrate	400
Boric Acid	6.2
Calcium Chloride, Anhydrous	72.5
Calcium Nitrate	386
Cupric Sulfate•$5H_2O$	0.25
Na_2 EDTA•$2H_2O$	37.3
Ferrous Sulfate•$7H_2O$	27.85
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H_2O	22.3
Molybdic Acid (Sodium Salt) •$2H_2O$	0.25

Potassium Phosphate, Monobasic	170
Potassium Sulfate	990
Zinc Sulfate•$7H_2O$	8.6
Glycine (Free Base)	2
myo-Inositol	100
Nicotinic Acid (Free Acid)	0.5
Pyridoxine•HCl	0.5
Thiamine•HCl	1

Application Notes

Plant Tissue Culture Tested

Plant species: *Kalmia latifolia* (Mountain Laurel), *Rhododendron* spp.

This medium was originally developed for the culture of shoot tips of Mt. Laurel. The medium has since become a standard for the culture of many woody plant species.

Potassium nitrate has been eliminated from this medium and replaced with potassium sulfate. The levels of ammonium nitrate are ¼x compared to MS. Nitrogen is also provided by calcium

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nitrate.

References

Lloyd, G and BH McCown. 1981. Commercially-feasible micropropagation of Mountain Laurel, *Kalmia latifolia* , by shoot tip culture. Proc. Int. Plant Prop. Soc. 30:421-427.

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