



Product Information Sheet

L449

Lloyd & McCown Woody Plant Basal Medium with Vitamins

Synonym: WPM w/ Vitamins

Properties:

Form: Powder
Appearance: White to Yellow Powder
Application: Plant Tissue Culture
Solubility: Water
Typical Working Concentration: 2.41 g/L
Storage Temp: 2-8°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 ₂ O	0.25
Na ₂ EDTA•2H ₂ O	37.3
Ferrous Sulfate•7H ₂ O	27.85
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H ₂ O	22.3
Molybdic Acid (Sodium Salt) •2H ₂ O	0.25

Potassium Phosphate, Monobasic	170
Potassium Sulfate	990
Zinc Sulfate•7H ₂ O	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 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 ¼ X compared to MS. Nitrogen is also provided by calcium nitrate.

PhytoTechnology Laboratories® also carries Lloyd & McCown Woody Plant Basal Mixture (without vitamins) Product No. L154.

Please Note: While PhytoTechnology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References:

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

PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 913-341-5343; Fax: 1-888-449-8682 or 913-341-5442

Web Site: www.phytotechlab.com

© 2017 PhytoTechnology Laboratories, LLC