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Helping to Build a Better Tomorrow through Plant Science™

## **Product Information Sheet**

L449

## Lloyd & McCown Woody Plant Basal Medium

Synonym: WPM

**Properties** 

Form: Powder

Application: 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 Preparation of concentrated solutions is not recommended as insoluble

Stock Solution: 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)

Boric Acid 6.2 Calcium Chloride, Anhydrous 72.5 Calcium Nitrate 386 Cupric Sulfate•5H <sub>2</sub> O 0.25 Na <sub>2</sub> EDTA•2H <sub>2</sub> O 37.3	Ammonium Nitrate	400
Calcium Nitrate 386 Cupric Sulfate•5H <sub>2</sub> O 0.25 Na <sub>2</sub> EDTA•2H <sub>2</sub> O 37.3	Boric Acid	6.2
Cupric Sulfate•5H <sub>2</sub> O 0.25 Na <sub>2</sub> EDTA•2H <sub>2</sub> O 37.3	Calcium Chloride, Anhydrous	72.5
Na <sub>2</sub> EDTA•2H <sub>2</sub> O 37.3	Calcium Nitrate	386
	Cupric Sulfate•5H <sub>2</sub> O	0.25
Formula Culfotos ZLI O 27 05	Na <sub>2</sub> EDTA•2H <sub>2</sub> O	37.3
remous Sullate•/ $\Pi_2$ O 27.05	Ferrous Sulfate•7H <sub>2</sub> O	27.85
Magnesium Sulfate, Anhydrous 180.7	Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H₂O 22.3	Manganese Sulfate•H <sub>2</sub> O	22.3
Molybdic Acid (Sodium Salt) •2H <sub>2</sub> O 0.25	Molybdic Acid (Sodium Salt) •2H <sub>2</sub> O	0.25

Potassium Phosphate, Monobasic	170
Potassium Sulfate	990
Zinc Sulfate•7H <sub>2</sub> O	8.6
Glycine (Free Base)	2
myo-Inositol	100
Nicotinic Acid (Free Acid)	0.5
Pyridoxine•HCI	0.5
Thiamine•HCI	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 ½x compared to MS. Nitrogen is also provided by calcium nitrate.

### **India Contact**

## Life Technologies (India) Pvt Ltd.

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# **Product Information Sheet**

#### 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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### **India Contact**

## Life Technologies (India) Pvt Ltd.