



## Product Information Sheet

### **L477** **Linsmaier & Skoog Modified Basal Medium** **pH Adjusted and Buffered**

Synonym: Murashige & Skoog (MS) Medium with Minimal Organics (MSMO)

#### **Properties**

Form: Powder  
Appearance: White to Yellow Powder  
Application: Plant Tissue Culture  
Solubility: Water  
Typical Working Concentration: 5.53 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 Linsmaier and Skoog (1965).  
pH = 5.25 – 6.25

#### **Formula (mg/L)**

Ammonium Nitrate	1650
Boric Acid	6.2
Calcium Chloride, Anhydrous	332.2
Cobalt Chloride•6H <sub>2</sub> O	0.025
Cupric Sulfate•5H <sub>2</sub> O	0.025
Na <sub>2</sub> EDTA•H <sub>2</sub> O	37.26
Ferrous Sulfate•7H <sub>2</sub> O	27.8
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H <sub>2</sub> O	16.9
Molybdic Acid (Sodium Salt)•2H <sub>2</sub> O	0.25

Potassium Hydroxide	100
Potassium Iodide	0.83
Potassium Nitrate	1900
Potassium Phosphate, Monobasic	170
Zinc Sulfate•7H <sub>2</sub> O	8.6
MES (Free Acid)	1000
myo-Inositol	100
Thiamine•HCl	0.4

#### **Application Notes**

Plant Tissue Culture Tested

This medium is the standard Murashige & Skoog (MS) basal salts supplemented with Linsmaier and Skoog vitamins. The medium is pH adjusted and buffered with MES. Under most circumstances, adjusting the pH is not necessary; simply add water and any desired PGR's, gelling agent, or other supplements. The addition of MES will help to stabilize pH fluctuations during media preparation and culture.

**PhytoTechnology Laboratories, LLC**

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](http://www.phytotechlab.com)

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### References

Linsmaier, EM and F Skoog. 1965. Organic growth factor requirements of tobacco tissue culture. *Physiol. Plant.* 18:100-127.

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