



Product Information Sheet

L452 **Linsmaier & Skoog Modified Basal Medium** **w/ 30 g/L Sucrose & 7 g/L Agar** **pH Adjusted and Buffered**

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

Properties

Form: Powder
Appearance: White to Yellow
Application: Plant Tissue Culture
Solubility: Soluble in Water
Typical Working Concentration: 42.53 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).

Formula (mg/L)

Ammonium Nitrate	1650
Boric Acid	6.2
Calcium Chloride, Anhydrous	332.2
Cobalt Chloride•6H ₂ O	0.025
Cupric Sulfate•5H ₂ O	0.025
Na ₂ EDTA•2H ₂ O	37.26
Ferrous Sulfate•7H ₂ O	27.8
Magnesium Sulfate	180.7
Manganese Sulfate•H ₂ O	16.9
Molybdic Acid (Sodium Salt) •2H ₂ O	0.25
Potassium Hydroxide	100

Potassium Iodide	0.83
Potassium Nitrate	1900
Potassium Phosphate, Monobasic	170
Zinc Sulfate•7H ₂ O	8.6
Agar	7000
MES (Free Acid)	1000
myo-Inositol	100
Sucrose	30,000
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 or other supplements. The addition of MES will help to stabilize pH fluctuations during media preparation and culture.

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

© 2013 PhytoTechnology Laboratories®



Product Information Sheet

References

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

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

© 2013 PhytoTechnology Laboratories®