



## Product Information Sheet

**M482**

### **Malmgren Modified Terrestrial Orchid Medium Without Sucrose, Agar and Pineapple Powder**

#### **Properties**

Form:	Powder
Appearance:	Gray to Black
Application:	Orchid Culture
Solubility:	Water
Typical Working Concentration:	1.84 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 organic constituents as described by Malmgren (1996) without sucrose, pineapple powder, or agar.

#### **Formula**

**(mg/L)**

Calcium Phosphate, Tribasic	75
Na <sub>2</sub> EDTA•2H <sub>2</sub> O	37.26
Ferrous Sulfate•7H <sub>2</sub> O	27.8
Magnesium Sulfate, Anhydrous	97.69
Manganese Sulfate•H <sub>2</sub> O	1.54
Potassium Phosphate, Monobasic	75
Activated Charcoal	1000
D-Biotin	0.05

Casein, Enzymatic Hydrolysate	400
Folic Acid	0.5
Glycine (Free Base)	2
myo-Inositol	100
Nicotinic Acid (Free Acid)	5
Pyridoxine•HCl	5
Thiamine•HCl	10

#### **Application Notes**

Plant Tissue Culture Tested

Plant species: Terrestrial orchids including Paphiopedilum, Cypripedium, and Phragmipedium  
This medium is a good seed sowing medium for many terrestrial orchid species. Originally developed for Cypripedium, this medium is also used for germination of Phragmipedium and Paphiopedilum. Germination may be enhanced by including 50 ml of Coconut Water (C195) per liter of medium.

#### **References**

Malmgren, S. 1996. In: C. Allen, Editor, North American Native Terrestrial Orchids. *Propagation and Production Conf. Proc.*, pp 63-71.

**PhytoTechnology Laboratories®**

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

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

Fax: 888-449-8682 or 1-913-341-5442

Web Site: [www.phytotechlab.com](http://www.phytotechlab.com)

© 2014 PhytoTechnology Laboratories®