

M551

**Malmgren Modified Terrestrial Orchid Medium
Without Sucrose**

Properties

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| Form: | Powder |
| Appearance: | Gray powder |
| Application: | Orchid Culture |
| Solubility: | Water |
| Typical Working Concentration: | 28.84 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, agar, and organic constituents as described by Malmgren (1996) pH = 3.75 – 4.75 |

Formula

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|--|-------|-------------------------------|--------|
| Calcium Phosphate, Tribasic | 75 | Casein, Enzymatic Hydrolysate | 400 |
| Na ₂ EDTA•2H ₂ O | 37.26 | Folic Acid | 0.5 |
| Ferrous Sulfate•7H ₂ O | 27.8 | Glycine (Free Base) | 2 |
| Magnesium Sulfate, Anhydrous | 97.69 | myo-Inositol | 100 |
| Manganese Sulfate•H ₂ O | 1.54 | Nicotinic Acid (Free Acid) | 5 |
| Potassium Phosphate, Monobasic | 75 | Pineapple Powder | 20,000 |
| Activated Charcoal | 1000 | Pyridoxine•HCl | 5 |
| Agar | 7000 | Thiamine•HCl | 10 |
| D-Biotin | 0.05 | | |

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.