

### Product Information Sheet

## M5642

### Murashige & Skoog (MS) Basal Medium, Van der Salm Modification

#### Properties

Form:	Fine Powder
Appearance:	Light Burgandy Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working Concentration:	4.46 g/L
Storage Temp:	2-6°
Storage Temp of Stock Solution:	Preparation of concentrated solutions is not recommended as insoluble precipitates may form.
Other Notes:	Contains the macro- & micronutrients and vitamins as described by Murashige and Skoog (1962) with the iron source as described by Van der Salm et al. (1994). Unadjusted pH = Approx. 3.5-4.5

#### 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
FeNa-EDDHA	96.0
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H <sub>2</sub> O	16.9
Molybdcic Acid (Sodium Salt)• 2H <sub>2</sub> O	0.25

Potassium Iodide	0.83
Potassium Nitrate	1900
Potassium Phosphate, Monobasic	170
Zinc Sulfate•7H <sub>2</sub> O	8.6
Glycine (Free Base)	2
myo-Inositol	100
Nicotinic Acid (Free Acid)	0.5
Pyridoxine•HCl	0.5
Thiamine•HCl	0.1

#### Application Notes

Plant Tissue Culture Tested

Plant species: Originally published for use on the rose rootstock cv 'Moneyway' due to chlorosis in shoots cultured on the standard MS formula.

#### References

Murashige, T and F Skoog. 1962. A revised medium for rapid growth and bioassays with tobacco tissue cultures. *Physiol. Plant.* 15: 473-497.

Van der Salm, TMP, CJG Van der Toorn, CH Hänisch ten Cate, LAM Dubois, DP De Vries, and HJM Dons. 1994. Importance of the iron chelate formula for micropropagation of *Rosa Hybrida* L. 'Moneyway'. *Plant Cell Tiss. and Organ Cult.* 37:73-77.

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