

### Product Information Sheet

#### M491

### Murashige Modified Shoot Multiplication Basal Medium

Synonym: Murashige & Skoog (MS) Shoot Multiplication Medium A

#### Properties

Form:	Fine to Fluffy Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working Concentration:	4.68 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- and micronutrients as described by Murashige and Skoog (1962) and the vitamins described by Linsmaier and Skoog (1965). Also contains (mg/L): 170 Sodium Phosphate Monobasic, 80 Adenine Hemisulfate, 30.0 2iP, 0.3 IAA, and Ferric Sodium EDTA in place of Ferrous Sulfate and Disodium EDTA.

#### Formula (mg/L)

Ammonium Nitrate	1650
Boric Acid	6.2
Calcium Chloride, Anhydrous	333
Cobalt Chloride•6H <sub>2</sub> O	0.025
Cupric Sulfate•5H <sub>2</sub> O	0.025
Ferric Sodium EDTA	36.7
Magnesium Sulfate, Anhydrous	181
Manganese Sulfate•H <sub>2</sub> O	16.9
Molybdic Acid (Sodium Salt)• 2H <sub>2</sub> O	0.25
Potassium Iodide	0.83

Potassium Nitrate	1900
Potassium Phosphate, Monobasic	170
Sodium Phosphate, Monobasic	170
Zinc Sulfate•7H <sub>2</sub> O	8.6
Adenine Hemisulfate	80
6-γ,γ-Dimethylallylaminopurine (2iP)	30.0
Indoleacetic Acid	0.3
myo-Inositol	100
Thiamine•HCl	0.4

#### Application Notes

Plant Tissue Culture Tested

#### References

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

#### India Contact

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

Revised 3/2007

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