

# **Product Information Sheet**

M404

# Murashige & Skoog (MS) Modified Basal Medium w/ Gamborg Vitamins

#### **Properties**

Form:	Fine to Fluffy Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working	4.44 g/L
Concentration:	4.44 y/L
Storage Temp:	2-6°
Storage Temp of	Preparation of concentrated solutions is not recommended as insoluble
Stock Solution:	precipitates may form.
Other Notes:	Contains the macro- and micronutrients as described by Murashige and
	Skoog (1962) and vitamins as described by Gamborg, et al. (1968).
	pH = 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	
Na <sub>2</sub> EDTA•2H <sub>2</sub> O	37.26	
Ferrous Sulfate	27.8	
Magnesium Sulfate, Anhydrous	180.7	
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
Zinc Sulfate•7H <sub>2</sub> O	8.6
myo-Inositol	100
Nicotinic Acid (Free Acid)	1
Pyridoxine•HCI	1
Thiamine•HCI	10

## **Application Notes**

Plant Tissue Culture Tested Plant species: Potato

#### References

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

Gamborg, OL, RA Miller and K Ojima. 1968. Nutrient requirements of suspension cultures of soybean root cells. Exp. Cell Res. 50: 151-158.

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