

Formulations & Specifications

Murashige & Skoog with Vitamins

MS with macro- and micro-nutrients and vitamins and glycine as described by Murashige and Skoog (1962).

Components	mg/L
Ammonium Nitrate (NH ₄ NO ₃)	1650.0000
Boric Acid (H ₃ BO ₃)	6.2000
Calcium Chloride, Anhydrous (CaCl ₂)	332.2000
Cobalt Chloride, Hexahydrate (CoCl ₂ · 6H ₂ O)	0.0250
Cupric Sulfate, Pentahydrate (CuSO ₄ · 5H ₂ O)	0.0250
EDTA, Disodium, Dihydrate (C ₁₀ H ₁₄ N ₂ Na ₂ O ₈ · 2H ₂ O)	37.2600
Ferrous Sulfate, Heptahydrate (FeSO ₄ · 7H ₂ O)	27.8000
Glycine (C ₂ H ₅ NO ₂)	2.0000
Magnesium Sulfate, Anhydrous (MgSO ₄)	180.7000
Manganese Sulfate, Monohydrate (MnSO ₄ · H ₂ O)	16.9000
Molybdc Acid Sodium Salt, Dihydrate (Na ₂ MoO ₄ · 2H ₂ O)	0.2500
Myo-Inositol (C ₆ H ₁₂ O ₆)	100.0000
Nicotinic Acid (C ₆ H ₅ NO ₂)	0.5000
Potassium Iodide (KI)	0.8300
Potassium Nitrate (KNO ₃)	1900.0000
Potassium Phosphate, Monobasic, Anhydrous (KH ₂ PO ₄)	170.0000
Pyridoxine, Hydrochloride (C ₈ H ₁₁ NO ₃ · HCl)	0.5000
Thiamine, Hydrochloride (C ₁₂ H ₁₇ CIN ₄ OS · HCl)	0.1000
Zinc Sulfate, Heptahydrate (ZnSO ₄ · 7H ₂ O)	8.6000