



Product Information Sheet

G371 Gresshoff & Doy Basal Medium

Properties

Form:	Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Soluble in Hot Water
Typical Working Concentration:	2.71 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 and vitamins as described by Gresshoff and Doy (1974).

Formula (mg/L)

Ammonium Nitrate	1000
Boric Acid	0.3
Calcium Nitrate	241.2
Cobalt Chloride·6H ₂ O	0.025
Cupric Sulfate·5H ₂ O	0.025
Na ₂ EDTA·2H ₂ O	37.25
Ferrous Sulfate·7H ₂ O	27.85
Magnesium Sulfate, Anhydrous	17.1
Manganese Sulfate·H ₂ O	1
Molybdcic Acid (Sodium Salt)·2H ₂ O	0.025
Potassium Chloride	65

Potassium Iodide	0.8
Potassium Nitrate	1000
Potassium Phosphate, Monobasic	300
Zinc Sulfate·7H ₂ O	0.3
D-Biotin	0.2
Glycine (Free Base)	4
myo-Inositol	10
Nicotinic Acid (Free Acid)	0.1
Pyridoxine·HCl	0.1
Thiamine·HCl	1

Application Notes

Plant Species: Grapevine (*Vitis*), *Arabidopsis*, tomato, barley (Gresshoff & Doy, 1974); *Trifolium repens* (Gresshoff, 1980).

This medium was originally developed for the growth of haploid callus and plants from anthers of *Vitis vinifera*. Anthers cultured in late prophase of meiosis gave best results for haploid plantlet development.

References

- Gresshoff, PM and CH Doy. (1974) Derivation of a haploid cell line from *Vitis vinifera* and the importance of the stage of meiotic development of anthers for haploid culture of this and other genera. Z. Pflanzenphysiol. 73: 132-141.
- Gresshoff, PM (1980) In vitro culture of white clover: callus, suspension protoplast culture and plant regeneration. Bot. Gaz. (Chicago), 141: 157-164

PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 913-341-5343; Fax: 1-888-449-8682 or 913-341-5442

Web Site: www.phytotechlab.com

© 2014 PhytoTechnology Laboratories®