



Product Information Sheet

D146 DCR Basal Salt Mixture

Properties

Form:	Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working Concentration:	1.64 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 as described by Gupta and Durzan. (1985). pH = 3.5 – 4.5

Formula (mg/L)

Ammonium Nitrate	400
Boric Acid	6.2
Calcium Chloride, Anhydrous	64.14
Calcium Nitrate	386.31
Cobalt Chloride·6H ₂ O	0.025
Cupric Sulfate·5H ₂ O	0.25
Na ₂ EDTA·2H ₂ O	37.3
Ferrous Sulfate·7H ₂ O	27.8
Magnesium Sulfate, Anhydrous	180.7

Manganese Sulfate·H ₂ O	22.3
Molybdic Acid (Sodium Salt)·2H ₂ O	0.25
Nickel Chloride·6H ₂ O	0.025
Potassium Iodide	0.83
Potassium Nitrate	340
Potassium Phosphate, Monobasic	170
Zinc Sulfate·7H ₂ O	8.6

Application Notes

Plant Tissue Culture Tested

Plant Species: Douglas Fir (*Pseudotsuga* spp.) and Sugar Pine (*Pinus lambertiana*)

This medium was developed to promote shoot proliferation. This formulation has approximately ¼ the concentration of NH₄NO₃ and KNO₃ compared to MS. Additional Ca⁺² and NO₃⁻ ions are supplied by Ca(NO₃)₂.

References

Gupta, PK and KJ Durzan. 1985. Shoot multiplication from mature Douglas-fir and sugar pine. Plant Cell Reports 4:177-179.

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