

PhytoTechnology Laboratories®

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Product Information Sheet

D146 **DCR Basal Salt Mixture**

Properties

Form: Powder

Appearance: White to Yellow Powder Application: Plant Tissue Culture

Solubility: Water

Typical Working

1.64 g/L

Concentration: Storage Temp: 2 – 6° C

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 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-5H₂O	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 1/4 the concentration of NH₄NO₃ and KNO₃ compared to MS. Additional Ca⁺² and NO₃ ions are supplied by $Ca(NO_3)_2$.

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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India Contact

Life Technologies (India) Pvt Ltd,