

PhytoTechnology Laboratories®

Helping to Build a Better Tomorrow through Plant Science™

Product Information Sheet

DKW Basal Medium

Synonym: DKW Basal Salts w/ Sucrose;

Driver and Kuniyuki Walnut medium

Properties

Form: Powder

Appearance: White to Yellow Application: Plant Tissue Culture

Solubility: Water

Typical Working

15.22 q/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 Driver and Kuniyuki

(1984) and McGranahan, et al. (1987). Does not contain vitamins, does

contain 10 g/L sucrose.

pH = 3.5 - 4.5

Formula (mg/L)

Ammonium Nitrate	1416
Boric Acid	4.8
Calcium Chloride, Anhydrous	112.5
Calcium Nitrate	1367
Cupric Sulfate-5H ₂ O	0.25
Na2 EDTA-2H ₂ O	45.4
Ferrous Sulfate-7H ₂ O	33.8
Magnesium Sulfate, Anhydrous	361.49

Manganese Sulfate⋅H ₂ O	33.5
Molybdic Acid (Sodium Salt)-2H ₂ O	0.39
Nickel Sulfate-6H ₂ O	0.005
Potassium Phosphate, Monobasic	265
Potassium Sulfate	1559
Zinc Nitrate-6H ₂ O	17
Sucrose	10,000

Application Notes

Plant species: Northern California Walnut (Juglans hindsii).

This medium was developed for the multiplication of shoots from nodal explants. The medium was supplemented with 4.5 µM BA and 5 nM IBA. Rooting the shoots was enhanced by dipping the basal ends of the shoots in 5 mM IBA prior to transferring to the greenhouse.

References

Driver, J.A. and A.H. Kuniyuki. 1984. In vitro propagation of Paradox walnut rootstock. HortScience 19:507-509.

McGranahan, GH, et al. 1987. In: Bonga, JB and DJ Durzan, Editors, Cell and Tissue Culture in Forestry. Martinus Nijhoff, Dordrecht, pp 261-271.

India Contact

Life Technologies (India) Pvt Ltd,