



## Product Information Sheet

**D191**

### 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 Concentration: 15.22 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 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 <sub>2</sub> O	0.25
Na <sub>2</sub> EDTA·2H <sub>2</sub> O	45.4
Ferrous Sulfate·7H <sub>2</sub> O	33.8
Magnesium Sulfate, Anhydrous	361.49

Manganese Sulfate·H <sub>2</sub> O	33.5
Molybdic Acid (Sodium Salt)·2H <sub>2</sub> O	0.39
Nickel Sulfate·6H <sub>2</sub> O	0.005
Potassium Phosphate, Monobasic	265
Potassium Sulfate	1559
Zinc Nitrate·6H <sub>2</sub> 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.

#### PhytoTechnology Laboratories®

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

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

Web Site: [www.phytotechlab.com](http://www.phytotechlab.com)

© 2014 PhytoTechnology Laboratories®